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Preliminary report on the protection of the environment in relation to armed conflicts

Submitted by Marie G. Jacobsson, Special Rapporteur

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I. Introduction

1. It has long been recognized that environmental effects that occur both during and after an armed conflict have the potential to pose a serious threat to the livelihoods and even the existence of individual human beings and communities. Unlike many of the other consequences of armed conflict, environmental harm may be long-term and irreparable and has the potential to prevent an effective rebuilding of the society, destroy pristine areas and disrupt important ecosystems. [1]

2. The protection of the environment in armed conflicts to this point has been viewed primarily through the lens of the law of armed conflict. However, this perspective is too narrow, as modern international law recognizes that the international law applicable during an armed conflict may be wider than the law of armed conflict. This has also been recognized by the International Law Commission, including in its recent work on the effects of armed conflicts on treaties. This work takes, as its starting point, the presumption that the existence of an armed conflict does not ipso facto terminate or suspend the operation of treaties. [2]

3. Since the applicable law in relation to armed conflict clearly extends beyond the realm of the law of armed conflict, it is sometimes not sufficient to refer to international humanitarian law as *lex specialis* in the hope of finding a solution to a specific legal problem. Other areas of international law may be applicable, such as international human rights and international environmental law. The International Court of Justice has recognized as much — albeit without elaborating on when one set of rules takes precedence over the other:

> More generally, the Court considers that the protection offered by human rights conventions does not cease in case of armed conflict, save through the effect of provisions for derogation of the kind to be found in Article 4 of the International Covenant on Civil and Political Rights. As regards the relationship between international humanitarian law and human rights law, there are thus three possible situations: some rights may be exclusively matters of international humanitarian law; others may be exclusively matters of human rights law; yet others may be matters of both these branches of international law. In order to answer the question put to it, the Court will have to take into consideration both these branches of international law, namely human rights law and, as *lex specialis*, international humanitarian law. [3]

4. In its advisory opinion on the legality of the threat or use of nuclear weapons, the Court has also recognized that environmental considerations must be taken into account in wartime:

> The Court thus finds that while the existing international law relating to the protection and safeguarding of the environment does not specifically prohibit the use of nuclear weapons, it indicates important environmental factors that

[1] See the syllabus of the topic contained in the report of the International Law Commission on its sixty-third session (A/66/10), annex E.

[2] A/66/10, para. 100, draft article 3 on the effects of armed conflicts on treaties.

[3] *Legal Consequences of the Construction of a Wall on the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004*, p. 136, para. 106.

> are properly to be taken into account in the context of the implementation of the principles and rules of the law applicable in armed conflict.[4]

In arriving at this finding, the Court recalled its conclusion in the order related to the request for an examination of the situation in accordance with paragraph 63 of the Court's judgment of 20 December 1974 in the *Nuclear Tests (New Zealand v. France)* case, where the Court stated that its conclusion was "without prejudice to the obligations of States to respect and protect the natural environment".[5] The Court indicated that "[a]lthough that statement was made in the context of nuclear testing, it naturally also applies to the actual use of nuclear weapons in armed conflict".[6] It should also be noted that the underlying assumption of the Court's reasoning has also been recognized by the International Law Commission, inter alia, in its work on fragmentation.[7]

5. Even if one were to assume that only the law of armed conflict is applicable during an armed conflict, that law contains rules relating to measures taken before and after an armed conflict. The law of armed conflict is therefore not confined to the situation of an armed conflict as such. Accordingly, applicable rules of the *lex specialis* (the law of armed conflict) coexist with other rules of international law.[8]

6. It appears as if no State or judicial body questions the parallel application of different branches of international law, such as human rights law, refugee law and environmental law. It also seems as if States and judicial bodies are undecided as to the precise application of those areas of the law. The caution on the part of States and judicial bodies to determine exactly how parallel application may work or when the *lex specialis* clearly prevails as the only applicable law may be understandable. At the same time, there is a need to analyse and reach conclusions with respect to this uncertainty.

7. The legal and political landscape has changed since specific rules for the purpose of protecting the environment during armed conflict were adopted almost 40 years ago, namely, the 1976 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD) and Protocol I additional to the 1949 Geneva Conventions.[9] At that time, international

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[4] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226, para. 33. It should be underlined that it is the Court's general conclusion that "important environmental factors that are properly to be taken into account in the context of the implementation of the principles and rules of the law applicable in armed conflict" that is of interest for the present topic and not its consideration of any particular weapon.

[5] *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the* Nuclear Tests (New Zealand v. France) *Case, I.C.J. Reports 1995*, p. 288, para. 64.

[6] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226, at p. 243.

[7] Report of the Study Group of the International Law Commission on the fragmentation of international law: difficulties arising from the diversification and expansion of international law (A/CN.4/L.682).

[8] Ibid., para. 173.

[9] Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 10 December 1976 (United Nations, *Treaty Series*, vol. 1108, No. 17119), and the Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I), 8 June 1977 (ibid., vol. 1125, No. 17512).

environmental law was in its infancy. Moreover, armed conflicts back then were of a different character. That is to say, most conflicts were classified as being of an international character or a liberation war, whereas non-international armed conflicts of a different character are most common today. This new reality may pose a challenge when applying existing law.

II. Inclusion of the topic in the programme of work of the Commission and previous consultations in the Commission

8. It is against the background outlined above that the Commission, at its sixty-third session (in 2011), decided to include the topic "Protection of the environment in relation to armed conflicts" in its long-term programme of work.[10] The topic was included on the basis of the proposal reproduced in annex E to the report of the Commission on the work of that session.[11] The General Assembly, in paragraph 7 of its resolution 66/98, took note of the inclusion of the topic in the Commission's long-term programme of work.

9. At its sixty-fifth session (in 2013), the Commission decided to include the topic "Protection of the environment in relation to armed conflicts" in its programme of work and decided to appoint Ms. Marie G. Jacobsson as Special Rapporteur for the topic.

10. Upon its inclusion in the long-term programme of work, consideration of the topic proceeded to informal consultations, which began during the sixty-fourth session of the Commission, in 2012. The informal consultations in 2012 offered members the opportunity to present their views on the topic. The informal consultations demonstrated that members favoured the inclusion of the topic on the agenda of the Commission — no member expressed opposition to the inclusion of the topic.

11. At its sixty-fifth session (in 2013), the Commission held more substantive informal consultations. These initial consultations offered members of the Commission an opportunity to reflect and comment on the road ahead. The elements of the work discussed included scope and the general methodology, including the division of work into temporal phases, as well as the timetable for future work. The time frame envisaged was three years, with one report to be submitted for consideration by the Commission each year.

12. On the basis of the informal consultations, the Special Rapporteur presented an oral report to the Commission, of which the Commission took note.[12] The Commission also agreed to formulate a request to States to provide examples of when international environmental law, including regional and bilateral treaties, had continued to apply in times of international or non-international armed conflict.[13]

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[10] A/66/10, paras. 365-367. This implies that the topic had met the criteria for the selection of topics recommended by the Commission. See *Yearbook of the International Law Commission, 1998*, vol. II, Part Two (United Nations publication, Sales No. E.00.V.11 (Part 2)), para. 553.

[11] A/66/10, annex E.

[12] A/68/10, para. 133. The consultations took place on 6 June and 9 July 2013.

[13] A/68/10, chap. III, Specific issues on which comments would be of particular interest to the Commission, para. 28.

III. Debate in the Sixth Committee of the General Assembly at its sixty-eighth session (2013)

13. Some 30 States addressed the topic during the sixty-eighth session of the Sixth Committee of the General Assembly, and they did so on the basis of the report of the International Law Commission on the work of its sixty-fifth session (2013) (A/68/10).[14] A large majority of States explicitly welcomed the inclusion of the topic, and several States made substantive statements.[15] Of the 30 States that spoke during the debate, only 2 expressed their doubts concerning the decision to include the topic.[16] There were also some concerns expressed as to the scope of the topic and the risk of ramifications far beyond the topic of environmental protection in relation to armed conflict.[17] One State was of the opinion that progressive development was needed in this area of the law.[18]

14. In general, States welcomed the temporal approach and the general methodology. Some underlined the difficulties in separating the different phases.[19] While some expressed their preference as to which phase should be the focus of the work, it is not possible to draw a general conclusion. A few States explicitly underlined that phase II (on measures during armed conflict) should not be the main focus of the work, since there already exist rules and principles addressing situations of armed conflict. Some States[20] welcomed and underscored the importance of addressing both international and non-international armed conflicts. A few States indicated that refugee law or consequences for the environment in the context of refugees and internally displaced persons should be addressed.[21] Some States discussed whether weapons should be addressed and divergent views were

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[14] These were: Austria, Belgium, Cuba, Czech Republic, Finland (on behalf of the Nordic countries: Denmark, Finland, Iceland, Norway and Sweden), France, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Ireland, Italy, Japan, Malaysia, Mexico, Peru, Portugal, Romania, Russian Federation, Singapore, Slovenia, South Africa, Spain, Switzerland, United Kingdom of Great Britain and Northern Ireland and United States of America. The statements are available from https://papersmart.unmeetings.org/ga/sixth/68th-session/agenda/81. The present report will nonetheless refer to the summary records of the debate, as is the common practice of the Commission.

[15] E.g. Austria (A/C.6/68/SR.23, para. 68), Cuba (A/C.6/68/SR.25, para. 70), Finland, on behalf of the Nordic countries (A/C.6/68/SR.23, para. 44), Greece (A/C.6/68/SR.24, para. 46), Iran (Islamic Republic of) (A/C.6/68/SR.26, para. 8), Italy (A/C.6/68/SR.24, para. 2), Malaysia (A/C.6/68/SR.25, para. 29), Mexico (ibid., para. 17), New Zealand (A/C.6/68/SR.24, para. 102), Portugal (A/C.6/68/SR.17, para. 86) and South Africa (A/C.6/68/SR.24, para. 24).

[16] The Russian Federation was of the view that "sufficient regulation already existed under international humanitarian law" and that "the period before and after an armed conflict was considered to be peacetime, during which the general rules applicable to the protection of the environment were fully applicable" (A/C.6/68/SR.25, para. 47). France "reaffirmed the doubts expressed earlier on the feasibility of work on such an issue" (A/C.6/68/SR.17, para. 105).

[17] United States (A/C.6/68/SR.23, para. 54).

[18] Malaysia (A/C.6/68/SR.25, para. 29).

[19] This view is in line with the position by the Special Rapporteur in her oral report to the Commission in 2013 in which it was suggested that there could not be a strict dividing line between the different phases; see A/68/10, para. 137.

[20] Austria (A/C.6/68/SR.23, para. 68), South Africa (A/C.6/68/SR.24, para. 28) and Switzerland (A/C.6/68/SR.23, para. 61).

[21] Iran (Islamic Republic of) (A/C.6/68/SR.26, para. 9) and South Africa (A/C.6/68/SR.24, para. 28).

expressed.[22] One State wanted the Commission to address demining.[23] Another State underlined the importance of considering questions of liability in connection with environmental damage.[24] Some States also emphasized the impact of warfare on sustainable development.[25] One State wanted the protection of cultural property to be included.[26]

15. A few States addressed the possible outcome of the work on the topic and expressed the preference for draft guidelines rather than draft articles.[27] Two States asserted that the topic was not suited for a draft convention.[28] On the other hand, one State believed that draft articles would be a fruitful outcome of the work on this issue by the Commission.

IV. Responses to specific issues on which comments would be of particular interest to the Commission

16. In its report on the work of its sixty-fifth session, in accordance with established practice, the Commission sought information on specific issues on which comments would be of particular interest to the Commission.[29] The Commission expressed its wish to:

> "have information from States on whether, in their practice, international or domestic environmental law has been interpreted as applicable in relation to international or non-international armed conflict. The Commission would particularly appreciate receiving examples of:
>
> (a) Treaties, particularly relevant regional or bilateral treaties;
>
> (b) National legislation relevant to the topic, including legislation implementing regional or bilateral treaties;
>
> (c) Case law in which international or domestic environmental law was applied to disputes arising from situations of armed conflict."[30]

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[22] Cuba (A/C.6/68/SR.25, para. 70), Malaysia (A/C.6/68/SR.25, para. 30) and Portugal (A/C.6/68/SR.23, para. 82) were of the view that weapons should be addressed, whereas Austria (A/C.6/68/SR.23, para. 69), Romania (A/C.6/68/SR.24, para 87), Singapore (A/C.6/68/SR.25, para. 114) and the United Kingdom (A/C.6/68/SR.23, para. 89) were of the view that weapons should not be included.

[23] Iran (Islamic Republic of) (A/C.6/68/SR.26, para. 9).

[24] New Zealand (A/C.6/68/SR.24, para. 103).

[25] Peru (A/C.6/68/SR.18, para. 27) and South Africa (A/C.6/68/SR.24, para. 24).

[26] Italy (A/C.6/68/SR.24, para. 4).

[27] India (A/C.6/68/SR.19, para. 21), Italy (A/C.6/68/SR.21, para. 5), Singapore (A/C.6/68/SR.25, para. 114).

[28] United States (A/C.6/68/SR.23, para. 55) and Spain (A/C.6/68/SR.25, para. 2). That the topic was likely better suited for non-binding guidelines was also suggested in the statement of the Special Rapporteur in her presentation of the topic to the Commission in 2013, see A/68/10, para. 143.

[29] A/68/10, para. 28.

[30] Ibid.

17. The following States responded to the Commission's request: Botswana, Czech Republic,[31] El Salvador, Germany and Mexico.

18. Botswana informed the Commission that it was not a party to treaties dealing with the protection of the environment in armed conflict, nor had it implemented any domestic legislation dealing with the matter. In addition, Botswana informed the Commission that no domestic court had dealt with the matter.[32]

19. El Salvador's response[33] was divided into three sections: (a) action at the domestic level; (b) action at the international level; and (c) action at the regional level. The Constitution of El Salvador enshrines a duty of the State to protect natural resources as well as the diversity and integrity of the environment as a means of ensuring sustainable development. Furthermore, it provides that the protection, conservation, rational use, restoration or replacement of natural resources is a matter of public interest. This is further reflected in the Environment Act of 1998, the intention of which is to deal comprehensively with environmental issues by means of modern legal provisions consistent with the principle of the sustainability of economic and social development. El Salvador emphasized that the obligation established is a basic obligation of the State, municipalities and the general population and ensures the implementation of international conventions or treaties to which El Salvador is a party in this area. While the Environmental Act does not explicitly refer to environmental protection during armed conflicts, it does have a broad purpose which encompasses the obligations contained in various normative texts. Furthermore, as the duties of the State in this regard stem directly from the Constitution, it may be said that the obligation to protect the environment is applicable at all times, since there are no exceptions or provisions for suspension, even during armed conflicts.

20. El Salvador concluded that this reflects an indissoluble relationship between security and environmental protection which remains even in situations not defined as armed conflict in the strictest sense. The relationship also operates in reverse: threats to the environment, especially natural disasters, have potentially adverse effects on security, since they create tensions and exclude persons who might have no other option but to join armed groups or commit various crimes.

21. Mexico indicated that the bilateral and multilateral environmental agreements to which it was a party had no particular obligation in respect of protection of the environment in relation to armed conflict. Mexico recalled that the 1977 Additional Protocol I prohibited the usage of means of combat that might cause severe and lasting damage to the environment and reiterated Principle 24 of the Rio Declaration on Environment and Development.[34]

22. Germany submitted information on bilateral agreements and information on a 2001 study made by the Federal Environmental Agency on the legal regulation of the effects of military activity on the environment, noting for example that

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[31] Note verbale dated 31 January 2014 from the Permanent Mission of the Czech Republic to the United Nations addressed to the Secretary-General.

[32] Note verbale dated 24 January 2014 from the Permanent Mission of Botswana to the United Nations addressed to the Secretary-General.

[33] Note verbale dated 29 January 2014 from the Permanent Mission of El Salvador to the United Nations addressed to the Office of Legal Affairs of the Secretariat.

[34] Note verbale dated 26 February 2014 from the Permanent Mission of Mexico to the United Nations addressed to the Secretary of the International Law Commission.

"[e]xisting international law provides limited protection against the contemporary threats posed by war to the environment".[35] It also informed the Commission that methods and means of warfare affecting the environment were addressed in the Federal Armed Forces 2013 Joint Service Manual of the Law of Armed Conflict.[36] Furthermore, Germany submitted quotations from bilateral agreements constituting State practice on the issue, namely one agreement between Germany and the Kosovo Force (KFOR)/North Atlantic Treaty Organization (NATO), as well as an agreement between the Governments of Germany and Afghanistan.[37] Both agreements concerned the export of waste generated during a deployment of KFOR and the Federal Armed Forces, respectively.

V. Practice of States and international organizations

23. In addition to the information provided by States in direct response to the invitation by the Commission, the Special Rapporteur has obtained information through communication with States and international organizations. Since it will assist with the reading of the present report, this information is set out in the following sections.

24. Despite the limited number of responses from States on the questions posed by the Commission in its 2013 report, the Special Rapporteur remains convinced that a considerable number of States have legislation or regulations in force aimed at protecting the environment in relation to armed conflict. First, military forces are subject to national legislation applicable in peacetime situations. The armed forces as a State entity are most likely subject to the same law as any other State entity, although special regulations may exist for the purpose of the specific tasks of the armed forces. Second, international law obligations and national restrictions are most often reflected in the rules of engagement for the armed forces of States. Third, following the cessation of hostilities, peacetime regulations are, again, applicable by default. This is in addition to specific regulations on cleaning up and restoration (for example, the clearing of mine fields).

25. It is the hope of the Special Rapporteur that States will provide further information to questions posed by the Commission. In the meantime, it is interesting to look at a few examples of national legislation.

26. During the debate in the Sixth Committee in 2013, some States referred to their legislation and/or environmental policy considerations. For example, the **United States of America** stated that the United States military had long made it a

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[35] Daniel Bodansky, *Legal Regulation of the Effects of Military Activity on the Environment*, vol. 5/03, Series *Berichte des Umweltbundesamtes* (Berlin, Erich Schmidt Verlag, 2003), Executive Summary, para. 2.

[36] Note verbale dated 30 December 2013 from the Permanent Mission of Germany to the United Nations addressed to the Secretary-General.

[37] Agreement dated 3 December 1999 and 15 February 2000 between the Government of the Federal Republic of Germany and KFOR/NATO on the export from Kosovo of waste during the KFOR deployment in order to dispose of it in an environmentally friendly way in Germany and agreement dated 6 July and 9 November 2002 between the Government of the Federal Republic of Germany and the Government of the Transitional Islamic State of Afghanistan on the export from Afghanistan of waste generated during the deployment of the Federal Armed Forces in order to dispose of it in an environmentally sound way, as cited in the note verbale from the Permanent Mission of Germany dated 30 December 2013.

priority to protect the environment, not only to ensure the availability of land, water, and airspace needed to sustain military readiness, but also to preserve irreplaceable resources for future generations, and reaffirmed that protection of the environment during armed conflict was desirable *as a matter of policy* for a broad range of military, civilian, health and economic reasons, in addition to purely environmental reasons (emphasis added).[38]

27. **China**'s Regulation of the Chinese People's Liberation Army on the Protection of the Environment contains provisions on the prevention and reduction of pollution and damage to the environment. It further contains an obligation to ensure that environmental protection requirements are met in studying and producing military equipment and to ensure that in the testing, use and destruction of such equipment, measures must be taken to eliminate or reduce any pollution and harm to the environment.[39] The army shall practice (adopt) a system of environmental impact assessments, which aims to cover a variety of activities such as organizing military exercises, testing of military equipment, handling of (military) waste and engineering construction. The measures prescribed in the Regulation appear to address pre-conflict situations, including weapons testing. They also seem to (partly) meet the requirement in Additional Protocol I.

28. The **Nordic countries** have a long engagement in environmental issues in general, as well as in the specific protection of the environment during armed conflict. Nordic countries made a pledge at the 31st International Conference of the Red Cross and Red Crescent in 2011, inter alia, "to undertake and support a concerted study highlighting the relevance of the existing legal framework for the protection of the natural environment in contemporary armed conflicts, and identifying any gaps in that context".[40] Such a study is presently being undertaken by Norway.[41]

29. The armed forces of **Denmark** are, as a general rule, covered by national legislation on such areas as urban planning, energy and environment. There are, nonetheless, certain exceptions and particular regulations pertaining to the military. Examples of these include the placement of wind turbines in the proximity of air bases and training areas,[42] and exceptions for military compounds or camps from the ordinance relating to the control of dangerous substances.[43] Among national legislation of interest to environmental protection, the law on compensation for environmental damage should be mentioned,[44] as well as the general law on environmental protection, which, according to its first article, aims to contribute to

[38] A/C.6/68/SR.23, para. 54.

[39] China's Regulation of the Chinese People's Liberation Army on the Protection of the Environment, 2004.

[40] Pledge P1290, submitted by the Governments of Denmark, Finland, Norway and Sweden and the National Red Cross Societies of Denmark, Finland, Norway and Sweden. Available from www.icrc.org/pledges.

[41] The Ministry of Foreign Affairs of Norway has commissioned the International Law and Policy Institute in Oslo to conduct the study.

[42] Air Navigation Act No. 1036 of 28 August 2013, paras. 67-68. Available from www.retsinformation.dk/Forms/R0710.aspx?id=158058.

[43] Risk Executive Order (*Bekendtgørelsen om kontrol med risikoen for større uheld med farlige stoffer*). Available from www.retsinformation.dk/Forms/R0710.aspx?id=13011.

[44] Ministry of Justice Law No. 225 of 6 April 1994 on compensation for environmental damage. Available from www.retsinformation.dk/Forms/R0710.aspx?id=59346.

the protection of nature and the environment, so that society can develop on a sustainable basis with respect for human conditions of life and the preservation of animal and plant life.[45]

30. In addition to national legislation, the Ministry of Defence of Denmark also has a number of strategies and policy provisions on environmental matters. The strategy on the environment states that Denmark is striving to ensure that its policies are in line with the environmental standards established by the International Organization for Standardization (ISO).[46] Before the end of 2018, all divisions of the Ministry of Defence shall adhere to these standards for the implementation of environmental management.[47] In international operations, the armed forces abide by a number of international standards and provisions regarding the protection of the environment, such as those established by NATO.[48]

31. The majority of environmental legislation in **Finland**, at both the European Union and national levels, includes some special regulations concerning the military. The Finnish Defence Forces adhere to environmental legislation whenever possible. In theory, exemptions are vital in order to ensure that environmental legislation does not undermine the operability and flexibility of the defence. However, in practice, such exemptions are seldom used. Examples of exemptions include noise emissions from fighter aircraft and exemptions in the Waste Act.[49] Special regulations include acts and decrees on individual nature protection areas that allow the military to use these areas as well.[50] An important exemption at the European Union level is the allowing of exemptions for substances used by the military as part of the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation.[51]

32. Also in Finland, environmental issues and impacts are assessed as part of the operational planning procedure, prior to any operations or important military training taking place, and Finland adheres to the existing NATO Standardization Agreements, which are documents detailing how such planning shall be carried

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[45] Environmental Protection Act No. 879 of 26 June 2010. Available from www.retsinformation.dk/Forms/R0710.aspx?id=132218.

[46] Ministry of Defence, Environment and Nature Strategy (*Forsvarsministeriets miljø- og naturstrategi*) 2012-2015, p. 17. Available from www.fmn.dk/temaer/klimaogmiljoe/Pages/Klimaogmiljoe.aspx. For more information regarding ISO standards on environmental protection, see ISO, *Environmental Management: The ISO 14000 Family of International Standards*, available from www.iso.org/iso/theiso14000family_2009.pdf.

[47] Ministry of Defence, Environment and Nature Strategy 2012-2015, p. 17.

[48] For further information on the environmental standards and policies of NATO, see inter alia www.nato.int/cps/en/natolive/topics_80802.htm.

[49] Waste Act (*Jätelaki/Avfallslag*), 646/2011. Available from www.finlex.fi/en/laki/kaannokset/2011/en20110646.

[50] E-mail communication between the Ministry of Defence of Finland and the Special Rapporteur.

[51] See Regulation EC No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 96/105/EC and 2000/21/EC, OJ L 396, 30 December 2006, p. 1, art. 2 (3) (regarding the scope of application of the regulation allowed exemptions from the Regulation in specific cases for certain substances where necessary in the interests of defence).

out.[52] In addition, environmental baseline studies are conducted before deployment to international operations.[53]

33. As part of the strategy of the Finnish Ministry of Defence, a Community and Environment Strategy is published and renewed periodically. Both the Finnish Defence Forces and the Construction Establishment of Defence Administration have their own environmental policies in accordance with the ISO guidelines. Some of the garrisons have certified ISO environmental management systems and the whole administration follows ISO standards. The Finnish Defence Forces also have a strategic environmental protection implementation plan[54] and, more recently, have systematically developed measures for environmental protection of shooting ranges and heavy weapons shooting areas.[55] Furthermore, the Ministry of Defence publishes an environmental report periodically.[56]

34. **Norway** has published a handbook regarding environmental protection in the armed forces,[57] as well as an action plan on the same topic.[58] In the latter publication, the Ministry of Defence of Norway notes that, because many environmental problems are of a transboundary character, it is important to find common solutions across State borders.[59] Partaking in international peacekeeping operations also necessitates cooperation with respect to the development of frameworks and targets for environmental protection.[60]

35. In accordance with the policy on environmental management in the Norwegian Armed Forces, environmental considerations shall be integrated into all planning and decision-making processes.[61] The armed forces have based their environmental policy on the ISO standards on the topic.[62] Furthermore, the armed forces have established an environmental database to which all units shall continuously report all activities, products or services that may affect the environment.[63]

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[52] See e.g. Standard Agreement 7141 (sixth edition), Joint NATO doctrine for environmental protection during NATO-led military activities.

[53] E-mail communication between the Ministry of Defence of Finland and the Special Rapporteur. It should also be noted that, in addition, the Ministry of Foreign Affairs of Finland has been a major financier of the work of the United Nations Environment Programme in the area of environmental protection in relation to peacekeeping operations.

[54] Matias Warsta, ed., *Conference Proceedings of the European Conference of Defence and the Environment, Helsinki, May 2013* (Helsinki, Finnish Ministry of Defence, 2013), pp. 165-172. Available from www.defmin.fi/files/2608/Conference_proceedings_web_2013.pdf.

[55] The Finnish Ministry of Defence estimates that the environmental protection investment has as of late been around €6-7 million annually for research and development and facilities development only. E-mail communication between the Finnish Ministry of Defence and the Special Rapporteur.

[56] See e.g. the report covering the period between 2010 and 2012 (in Finnish). Available from www.defmin.fi/files/2585/Puolustushallinnon_ymparistoraportti2010_2012.pdf.

[57] Norwegian Armed Forces, *Håndbok, Miljøvern i Forsvaret*, 31 October 2013.

[58] Norway, Ministry of Defence, *Handlingsplan-Forsvarets miljøvernarbeid*.

[59] Ibid., p. 27.

[60] Ibid.

[61] Norwegian Armed Forces, *Bestemmelser for miljøvern til bruk i Forsvaret*, Oslo, 21 March 2011, para. 3.1.

[62] For more information regarding ISO standards on environmental protection, see ISO, *Environmental Management: The ISO 14000 Family of International Standards*. Available from www.iso.org/iso/theiso14000family_2009.pdf.

[63] Norwegian Armed Forces, *Bestemmelser for miljøvern til bruk i Forsvaret*, para. 3.3.

36. The armed forces of Norway have operated in areas where conflicts have arisen owing to scarcity of resources, and remark in the handbook that it is likely that changes in climate will continue to affect the work of the armed forces in the future, either in operations in areas affected by scarcity of resources or in connection with refugee flows from such areas.[64] Therefore, sufficient knowledge about global and local environmental changes and conditions within the armed forces is crucial in order to understand the background to the conflict at hand, as well as to avoid the worsening of the environmental conditions in these areas.[65]

37. Referring to the many studies that have been conducted by the United Nations Environment Programme (UNEP) regarding the detrimental effects of war on the environment, the handbook notes that the armed forces of Norway shall not decrease the value of local environmental and natural resources during their service abroad. When there are differences between the Norwegian provisions and those governing the area of operations, the highest standard shall apply as far as possible, taking into consideration operative needs and other relevant conditions. However, the handbook also notes the difficulty in fully comprehending the local environmental conditions in a foreign country and, therefore, recommends that local environmental agencies, or other actors with relevant information on the topic, should be consulted, so that the mission can be adapted to best fit the local conditions and avoid damages to the environment.[66]

38. As part of its work to reduce toxic chemicals, Norway prohibited the use of lead-based bullets in 2005, and a voluntary agreement has been concluded with respect to the phasing out of ammunition containing lead on military practice grounds.[67]

39. The armed forces of **Sweden** are regulated by Swedish national legislation, that is to say, the 1998 Environmental Code, other national legislation, environmental permits and internal rules. Environmental permits can be granted in accordance with the Environmental Code and are generally administered by the appropriate county administrative board.[68] Each unit commander is personally responsible for ensuring that the conditions in the environmental permit are correctly adhered to.[69]

40. The armed forces of Sweden, Finland and the United States have published a guidebook, as well as a joint toolbox, on environmental protection.[70] In these materials, emphasis is placed on the importance of preventing damage to the environment, for example by undertaking risk assessments of the potential damage to the natural environment. The toolbox focuses on the following technical subject matter: solid waste management; hazardous material and hazardous waste management; water and wastewater management; spill prevention and response

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[64] Norwegian Armed Forces, *Håndbok. Miljøvern i Forsvaret*, p. 17.

[65] Ibid.

[66] Norwegian Armed Forces, *Håndbok. Miljøvern i Forsvaret*, pp. 48-49.

[67] Ibid., p. 101.

[68] Environmental Code (*Miljöbalken*) (SFS 1998:808), chap. 9, sect. 8.

[69] E-mail communication between the Ministry of Defence of Sweden and the Special Rapporteur.

[70] Environmental Guidebook for Military Operations, March 2008. Available from www.forsvarsmakten.se/Global/Myndighetswebbplatsen/4-Om-myndigheten/Vart-arbetssatt/Vart-miljoarbete/Guidebook_with_hyperlinks_and_cover.pdf.

planning; cultural property protection; and natural resource protection.[71] The armed forces of Sweden are also collaborating with the Norwegian Armed Forces and other actors in Cold Response, a joint military exercise in the northern part of Norway. This has resulted in a considerable decrease in the cost of damages to the territory affected by the drill.[72]

41. Since 2006, the Swedish Defence Research Agency (FOI) has been working on the environmental adaptation of the United Nations peacekeeping missions and on increasing awareness of the importance of environmental considerations both as a cause of conflict and as a factor in achieving a successful mission.[73] It contributed to the report entitled "Greening peace operations — policy and practice".[74]

42. In addition to information provided by States, the Special Rapporteur also obtained information directly from, and in relation to, international organizations.

United Nations peacekeeping missions environmental policy

43. Environmental considerations are also prominent within the context of United Nations peacekeeping operations. Both the Department of Peacekeeping Operations and the Department of Field Support explicitly recognize the potential damage by peacekeeping operations to the local environment. They are, therefore, actively working together towards ensuring environmental sustainability. They have jointly developed an overarching policy to deal with environmental issues.[75] The two Departments and their partners have recently noted the need for clearer and more systematic approaches to environmental assessments, and monitoring and evaluation, as part of overall operations management.[76]

44. The work done is aimed to fit into the Secretary-General's Greening the Blue initiative. In May 2012, UNEP released the report entitled *Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations*. The report, among other things, clarifies the important role that the United Nations missions can play in investigating and preventing concerns, such as ensuring that the sanitary conditions at the United Nations stabilization missions are adequate to

[71] Environmental Toolbox for Deploying Forces, developed through the trilateral cooperation of defence environmental experts from Finland, Sweden and the United States. Available from https://pfpconsortium.org/system/files/EnvToolboxDeployForces.pdf.

[72] Over the years, the cost is estimated to have decreased from around SKr 10 million to between SKr 1 million and SKr 2 million owing to a greater awareness of environmental costs and damages and the possibilities of preventing them; see www.forsvarsmakten.se/sv/aktuellt/2014/03/skydd-for-miljon.

[73] The engagement of Sweden dates back a number of decades to the predecessor of FOI.

[74] Annica Waleij and others, "Greening peace operations — policy and practice" (Stockholm, FOI, 2011). FOI is a partner to the Department of Peacekeeping Operations and the Department of Field Support; see www.un.org/en/peacekeeping/issues/environment/bestpractice.shtml.

[75] See United Nations, "Environment and sustainability". Available from www.un.org/en/peacekeeping/issues/environment.

[76] See United Nations, "Sharing best practice". Available from www.un.org/en/peacekeeping/issues/environment/bestpractice.shtml.

avoid contamination of local waterways,[77] as well as preventing deforestation and illicit trade in natural resources in the Democratic Republic of the Congo.[78]

North Atlantic Treaty Organization

45. All operational plans of NATO include environmental considerations as an integral part of planning. These considerations are based on the NATO Military Principles and Policies for Environmental Protection.[79] The Military Principles and Policies note that concerns for environmental protection have "grown in importance" worldwide, and observes that "[l]egal and regulatory emphasis to the protection of the environmental impacts during planned activities and mitigations of high risk behaviour is continuously increasing".[80] With respect to implementation, the Principles state that the Strategic Commands are responsible for integrating these principles and policies into concepts, directives and procedures in agreement with nations, and that NATO nations and partner nations are encouraged to adapt such standards accordingly.[81]

46. The extensive list of other references and documents produced by NATO on this and related subjects indicates the depth and breadth of the consideration by NATO of these matters.[82] For example, NATO status-of-forces agreements and other similar arrangements also contain provisions on the protection of the environment. In addition, NATO also has a number of Standardization Agreements related to various areas of environmental protection.[83]

Conclusions and disclaimer

47. It is obvious that the limited information obtained from States thus far with respect to the practice and policies in peacetime and during international peace operations is not enough to claim that a general universal practice exists. Nor is it possible to establish evidence of customary international law. Yet, it signals an awareness and clear ambition on the part of States and international organizations to take environmental considerations into account when planning and conducting military operations in peacetime. On the basis of the dates of these sources of law and policies, this is a new development that mirrors the general cognizance that environmental concerns cannot be disregarded. It is not possible to imagine that international military cooperation and peacekeeping operations could be pursued without having been preceded by environmental considerations. Of particular interest is the fact that the examples come from different regions. The detailed information obtained from the Nordic States serves as an example, but similar information could likely be obtained from other regions.

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[77] David Jensen and Silja Halle, eds., *Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations* (Nairobi, UNEP, 2012), pp. 8 and 33. Available from www.un.org/en/peacekeeping/publications/UNEP_greening_blue_helmets.pdf.

[78] Ibid., p. 37.

[79] NATO Military Principles and Policies for Environmental Protection (MC 0469/1), October 2011.

[80] Ibid., para. 1.

[81] Ibid., para. 9.

[82] For more information on the environmental protection policy of NATO, see www.nato.int/cps/en/natolive/topics_80802.htm.

[83] E-mail communication between the Office of Legal Affairs of NATO and the Special Rapporteur.

48. The Special Rapporteur remains convinced that more States have moved or are moving in the same direction and would, therefore, appreciate it if those States that have not yet responded to the invitation by the Commission could provide information accordingly. States and organizations are also welcome to contact the Special Rapporteur directly.

VI. Purpose of the present report

49. The present preliminary report will provide an introductory overview of phase I of the topic, namely the relevant rules and principles applicable to a potential armed conflict (peacetime obligations). As the report will focus its attention on phase I, it will not address measures to be taken during an armed conflict or post-conflict measures per se, even if preparatory acts necessary to implement such measures may need to be undertaken prior to the outbreak of an armed conflict.

50. The present report does not contain a general background to and rationale for the topic. The Special Rapporteur is of the view that this would be unnecessarily repetitious and prefers to refer to the syllabus contained in the 2011 report of the Commission.[84] This means that references to work by other bodies, such as the International Committee of the Red Cross (ICRC), will not be dealt with in the present report. Likewise, important documents such as the 1972 Stockholm Declaration and the 1992 Rio Declaration are not discussed in the present report.[85]

51. In framing the report, the Special Rapporteur has taken into account the following:

(a) The views expressed during the informal consultations in the Commission;

(b) The views expressed by States in the Sixth Committee of the General Assembly;

(c) The written information submitted by States in response to the request by the Commission included in chapter III of the report on the work of the Commission at its sixty-fifth session; and

(d) The information obtained through direct communication with States and international organizations.

52. The report will examine some aspects relating to scope and methodology, as well as the use of certain terms and the sources to be considered, before proceeding to a discussion of how this topic relates to some other topics previously addressed by the Commission, such as:

(a) The effects of armed conflicts on treaties;

(b) Non-navigational uses of international watercourses;

(c) Shared natural resources;

[84] A/66/10, annex E.

[85] For a compilation of treaties and political declarations, see ibid., appendix I.

(d) Prevention of transboundary harm from hazardous activities and the allocation of loss in the case of transboundary harm arising out of hazardous activities.[86]

53. The present report will also refer to ongoing work of the Commission that may be of specific relevance to the topic. The intention is not to restate the work of the Commission. Rather, it will serve as a reminder of the work that has already been done with a view to ensuring consistency, as appropriate.

54. Thereafter, the report will begin to develop the content of phase I by identifying existing legal obligations and principles arising under international environmental law that could guide preventive measures taken to reduce negative environmental effects resulting from a potential armed conflict. Principles and rules on precaution and prevention are especially important and will be introduced in greater depth. In addition, existing legal obligations of relevance to this topic which arise in the context of other areas of international law, such as human rights, will also be briefly introduced. This will include the concept of sustainable development.

55. Since peacetime law is fully applicable in situations where no armed conflict is ongoing, the challenge is to identify those rules and principles in peacetime that are relevant to the present topic. At this stage of the work, it would be premature to attempt to evaluate the extent to which these rules may continue to apply (or be influential) in situations of armed conflict and post-armed conflict. For example, although the precautionary principle and the obligation to undertake environmental impact assessments have comparable obligations under international humanitarian law, such rules under the law of armed conflict are far from identical to peacetime obligations. That said, parts of the underlying object and purpose of such wartime and peacetime obligations are arguably quite similar, and a comparison of such rules will be undertaken in a later report on phase II of the topic.

56. It is the aim of the Special Rapporteur to confine the present report to the most important principles, concepts and obligations, rather than trying to identify which conventions continue to apply during an armed conflict. Accordingly, the Special Rapporteur has not endeavoured to chart every single international or bilateral agreement that regulates the protection of the environment or human rights.[87] These treaties are fully applicable in peacetime, which is the focus of the present report.

57. It is worth recalling that the period starting from 1976 until the present day is of particular relevance to this topic. In 1976 the ENMOD Convention was adopted, followed by Additional Protocol I to the 1949 Geneva Conventions, one year later. These two legal instruments are important because they were the first legal instruments that expressly provided for the protection of the environment in armed conflicts.[88] The provisions of those instruments which address environmental

[86] The Special Rapporteur has, with the assistance of the Secretariat, identified the issues previously considered by the Commission which might be relevant to the present topic.

[87] An overview of relevant treaties and non-treaty practice is found in the syllabus to the topic; see A/66/10, annex E, appendix I.

[88] Additional Protocol I has 174 States parties, and the ENMOD Convention has 76 States parties; see www.icrc.org/applic/ihl/ihl.nsf/Treaty.xsp?documentId=2AC88FF62DB2CDD6C12563CD002D6EC1&action=openDocument.

protection are products of their time in the sense that they reflect the interests and environmental concern of the international community emerging at that time.[89]

VII. Some reflections on scope, methodology and outcome of the topic, based on the previous discussions in the Commission and at the United Nations

58. Issues concerning the scope, methodology and intended outcome of the work to be conducted on this topic were discussed during the consultations at the sixty-fifth session of the Commission (2013).[90] The Special Rapporteur maintains her proposal, first advanced at that session, that the topic be approached from a temporal perspective, rather than from the perspective of particular regimes of international law, such as environmental law, the law of armed conflict and human rights law. It is thus proposed that the Commission proceed to consider the topic in three temporal phases: before, during and after an armed conflict (phase I, phase II and phase III, respectively). The proposed approach is intended to make the topic more manageable and easier to delimit. Such an approach would enable the Commission to clearly identify particular legal issues relating to this topic that are likely to arise during the different stages of armed conflict. In addition, such an approach is likely to facilitate the development of concrete conclusions or guidelines.

59. The Special Rapporteur also maintains that the main focus of the work should be on phase I, that is, those peacetime obligations relevant to a potential armed conflict, as well as phase III, post-conflict measures. When looking at phase II, it would be particularly interesting to focus on situations of non-international armed conflicts.

60. While members of the Commission generally welcomed the approach of addressing the topic in temporal phases during the sixty-fifth session, different views were expressed with respect to the relative weight that should be accorded to each of the phases. Several members emphasized that phase II (rules applicable during an armed conflict) was the most important phase. Other members were of the opinion that the most important phases were either phase I, phase III, or both. The divergence in opinions within the Commission was similar to that expressed by States during the debate in the Sixth Committee.

61. As the Special Rapporteur has indicated previously, however, while conceptualizing the topic in phases will assist the Commission in its work, there cannot be a strict dividing line between the different phases. Such a dividing line would be artificial and would not be an accurate reflection of how the relevant legal rules operate. The law of armed conflict, for example, consists of rules applicable before, during and after an armed conflict. The temporal phases approach makes the topic more manageable and helps with delimiting its scope. As the work progresses, it will also become evident how the legal rules pertaining to the different temporal phases blend into each other.

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[89] This is described in the syllabus of the topic; see A/66/10, annex E.

[90] See ibid. The discussions were held on the basis of an informal working paper by the Chair which was to be read together with the syllabus of the topic presented in 2011.

62. Ultimately, regardless of the relative weight accorded to each of the phases, the departure point for the Commission's work on this topic should remain the same: the Commission has no intention of, nor is it in a position to, modify the law of armed conflict. Instead, it is proposed that the work of the Commission focus on identifying and clarifying the guiding principles and/or obligations relating to the protection of the environment which arise under international law in the context of (a) preparation for potential armed conflict; (b) the conduct of armed conflict; and (c) post-conflict measures in relation to environmental damage.

63. Before proceeding, it is also useful to enumerate a few particular topics that the Special Rapporteur suggests should not be included in the scope of this topic. In working towards the formulation of concrete guidelines or conclusions (or whatever final form the outcome of this topic may take), the Special Rapporteur has always been aware of the need to restrict the scope of the topic for practical, procedural and substantive reasons, and it is thus necessary that certain topics be excluded or approached cautiously.

64. To begin with, it is proposed that work on this topic not address situations where environmental pressure, including the exploitation of natural resources, causes or contributes to the outbreak of armed conflict. It is the Special Rapporteur's position that discussions concerning the root causes of armed conflict fall outside the present topic. That is not to say, however, that these issues are not important topics in and of themselves.[91]

65. In addition, the Special Rapporteur is reluctant to address the protection of cultural heritage as part of this topic. The protection of cultural property is highly regulated by specific international conventions, primarily through conventions adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), and such regulations cover both peacetime and situations of armed conflict.[92] It should be noted, however, that one State[93] and some members of the Commission have encouraged the Special Rapporteur to include cultural heritage in the topic.

66. During the informal consultations in the Commission in 2013, some members cautioned against addressing the issue of weapons, whereas a few members took the view that it should be addressed. A similar pattern emerged during the debate in the Sixth Committee.[94] The Special Rapporteur retains her view that addressing the effect of particular weapons should not be the focus of the topic. Nor should "weapons" be addressed as a separate issue. The law of armed conflict, applicable in situations of armed conflict, deals with all weapons on the same legal basis, namely,

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[91] For an updated discussion, see Onita Das, *Environmental Protection, Security and Armed Conflict: A Sustainable Development Perspective* (Cheltenham, Edward Elgar Publishing, 2013), in particular Das's discussion on early warning, early action and preventing environmental security threats in chap. 3, p. 66 ff.

[92] Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 14 May 1954, and its Protocol I (1954) and Protocol II (1999). One of the tasks of the Committee for the Protection of Cultural Property in the Event of Armed Conflict is to supervise the implementation of the 1999 Protocol. UNESCO has a solid structure to assist in protecting cultural heritage also in time of armed conflict, including emergency actions. Information on UNESCO activities can be found at www.unesco.org/new/en/culture/themes/armed-conflict-and-heritage/the-hague-convention.

[93] Italy (A/C.6/68/SR.24, para. 4).

[94] See sect. III of the present report.

the fundamental prohibition to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering. It is also prohibited to use weapons that are incapable of discriminating between civilian and military objects and whose effects cannot be limited. Questions relating to the specific weapons that fall under this prohibition have always been subject to divergent views. As a result, States have chosen to conclude specific treaties with respect to individual weapons, such as expanding bullets, chemical weapons, landmines and blinding laser weapons. Furthermore, States' reasoning for concluding these agreements is not always identical. For example, views may differ on how to regard agreements and particular provisions: as a disarmament measure, a law of armed conflict measure, or both? This flexible understanding has proved highly valuable in achieving the ultimate goal, that is, prohibitions or restrictions on the use of a specific weapon.

67. Finally, it is the Special Rapporteur's position that the issue of refugee law, more specifically the consequences for the environment of refugees and internally displaced persons (IDPs), should be approached cautiously. Individuals may have become refugees and IDPs for a variety of reasons, some of which may have nothing to do with armed conflict. Refugee camps may shelter an individual irrespective of his or her refugee status claim. At the same time, it must be acknowledged that millions of people have to leave their homes because of an armed conflict and may become refugees or IDPs. The environmental impact caused by fleeing persons, as well as refugee and IDP camps, can be considerable and has led to claims for compensation for destroyed land.[95] Some members of the Commission and a few States are of the view that such matters should be addressed, and the Special Rapporteur agrees that the question cannot be entirely ignored. Nevertheless, given the complexities of the subject and the legal protections accorded to victims of war, the Special Rapporteur is of the view that such questions must be approached in a cautious manner.

VIII. Use of terms

68. One preliminary matter that requires attention at this stage is the definition of key terms such as "armed conflict" and "environment". For the purpose of facilitating discussion, draft suggested definitions have been provided below. At this stage of the work, these draft suggestions are not made with the aim of obtaining the Commission's approval to send the definitions to the drafting committee. This would be premature. It is often the case that definitions need to be refined and adopted once the work has developed into a more mature stage and when it is possible to have a more informed understanding of the direction of the work. At the same time, it is important to hear the preliminary views of the Commission on the draft suggestions put forward in the present report. In addition, it seemed important to illustrate some questions that might arise when defining these terms. The suggestions are based on definitions previously adopted by the Commission. Needless to say, those definitions were adopted in their specific context and for the purpose of the work in which they were included. Yet, they are helpful, particularly in the light of the considerable effort to which the Commission went in formulating them.

[95] This was acknowledged in the syllabus to the topic; see A/66/10, annex E, para. 10.

"Armed conflict"

69. The Commission has defined "armed conflict" in the articles on the effects of armed conflicts on treaties[96] as follows:

> "armed conflict" means a situation in which there is resort to armed force between States or protracted resort to armed force between governmental authorities and organized armed groups.

70. The definition was developed for the purposes of the articles. The commentaries make it clear that it reflects the definition employed by the International Tribunal for the Former Yugoslavia in the *Tadić* decision.[97] However, the concluding words of the "definition" provided by the Tribunal are omitted. In the *Tadić* decision, the Tribunal describes the existence of an armed conflict as follows:

> "... [A]n armed conflict exists whenever there is a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups *or between such groups within a State*." (emphasis added)

71. In its work on the effects of armed conflict on treaties, the Commission decided to delete the last words of the definition ("or between such groups within a State") because the draft articles were conceived as applying only to situations involving at least one State party to the treaty.[98] The definition was adopted after profound analysis and lengthy discussions. Nevertheless, it deviates from interpretations of the term "armed conflict" contained in other treaties.[99] One prominent example is the Rome Statute of the International Criminal Court. The Court has jurisdiction, inter alia, over serious violations of the laws and customs applicable in armed conflicts not of an international character. As such, article 8, paragraph 2 (f), of the Rome Statute applies to "armed conflicts that take place in the territory of a State when there is protracted armed conflict between governmental authorities and organized armed groups or between such groups". It does not cover "situations of internal disturbances and tensions, such as riots, isolated and sporadic acts of violence or other acts of a similar nature".[100] The Rome Statute's use of the term is thus almost identical to that of the International Tribunal for the Former Yugoslavia used in the *Tadić* case. The Tribunal's definition

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[96] A/66/10, para. 100, draft article 2 (b) on the effects of armed conflicts on treaties.

[97] International Tribunal for the Former Yugoslavia, Case No. IT-94-1-A72, *Prosecutor v. Duško Tadić a/k/a "Dule"*, Appeals Chamber, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995, para. 70.

[98] A/66/10, para. 4 of the commentary to draft article 1 on the effects of armed conflict on treaties, p. 180.

[99] See e.g. articles 2 and 3 common to the 1949 Geneva Conventions (United Nations, *Treaty Series*, vol. 75, Nos. 970-973), and article 1 of the Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of non-international armed conflicts, 8 June 1977 (ibid., vol. 1125, No. 17513).

[100] Rome Statute of the International Criminal Court, 17 July 1998 (United Nations, *Treaty Series*, vol. 2187, No. 38544), art. 8, para. 2 (f).

differs, however, from an ICRC proposal[101] and from a definition suggested by the Institute of International Law.[102]

72. This brief description of the use of the term "armed conflict" indicates that it might not be sufficient to use the definition in the articles on the effects of armed conflicts on treaties. For the purpose of the current topic, the definition needs to be modified so as to include those conflicts that take place between organized armed groups or between such groups within a State. This modification would bring the definition in line with, or close to, the definition used in the *Tadić* case that is now contained in the Rome Statute.

73. This leaves the Commission with the following pertinent options:

(a) Adopt the definition in draft article 2 of the draft articles on the effect of armed conflicts on treaties, then modify it to include situations in which an armed conflict takes place without the involvement of a State;

(b) Provide for two separate definitions, one for international and one for non-international armed conflicts;

(c) Provide for a new definition for the purpose of the work on this topic; or

(d) Abstain from defining "armed conflict" at all.

74. The Special Rapporteur suggests that the Commission depart from the definition contained in draft article 2 of the draft articles on the effects of armed conflicts on treaties to encompass those situations when an armed conflict takes place without the involvement of a State. This would ensure that non-international armed conflicts are covered. It should be noted that there exists a close connection between the draft articles on the effects of armed conflicts on treaties and the present work. It is on this basis that any deviation from those draft articles should be both justified and explained.

75. The second option would be to provide for two definitions, one for international armed conflicts and one for non-international armed conflicts. The ICRC proposed definition of non-international armed conflict is more precise than the "definition" from the *Tadić* case. This is primarily due to the thresholds embedded in the ICRC definition. For the purpose of the present topic, it should suffice to embrace both categories in one definition.

76. The third option, namely, to provide for an entirely new definition for the purpose of the work on this topic, is less attractive to the Special Rapporteur. It is

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[101] ICRC has proposed the following definitions:
"1. International armed conflicts exist whenever there is resort *to armed force between two or more States*.
2. Non-international armed conflicts are *protracted armed confrontations* occurring between governmental armed forces and the forces of one or more armed groups, or between such groups arising on the territory of a State [party to the Geneva Conventions]. The armed confrontation must reach *a minimum level of intensity* and the parties involved in the conflict must show *a minimum of organization*." in ICRC, "How is the term 'armed conflict' defined in international humanitarian law?", ICRC Opinion Paper, March 2008. Available from www.icrc.org/eng/assets/files/other/opinion-paper-armed-conflict.pdf.

[102] 1985 resolution by the Institute of International Law on the effects of armed conflicts on treaties, adopted on 28 August 1985, session of Helsinki — 1985. Available from www.idi-iil.org/idiE/resolutionsE/1985_hel_03_en.pdf.

far more meaningful to build on definitions that have been previously negotiated and to try to align the work of the Commission with definitions already adopted. To add yet another definition would risk creating confusion.

77. The last option, that is, to abstain from defining "armed conflict" at all, is another possibility. The outcome of this topic will depend on previous definitions provided, as well as any further refinement arising out of new treaties and case law.

78. After considering the foregoing, the following use of the term is suggested:

> "Armed conflict" means a situation in which there is resort to armed force between States or protracted resort to armed force between governmental authorities and organized armed groups or between such groups within a State.

"Environment"

79. The Commission has previously defined "environment" in its work on principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities as follows:[103]

> "environment" includes natural resources, both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors, and the characteristic aspects of the landscape.[104]

80. The Commission noted that there was no internationally accepted definition of environment, but found it useful to adopt a "working definition".[105] In doing so, the Commission opted for a broader definition. This means that the definition is not limited to natural resources, such as air, soil, water, fauna and flora, and their interaction. The broader definition adopted by the Commission also embraces environmental values. The Commission opted to include "non-service values such as aesthetic aspects of the landscape".[106] This includes the enjoyment of nature because of its natural beauty and the recreational attributes and opportunities associated with it. The broader approach was regarded as justified by the general and residual character of the draft principles.[107]

81. Notably, the Commission referred to article 2 of the 1972 Convention concerning the Protection of the World Cultural and Natural Heritage in elaborating the definition mentioned above. For the purposes of that Convention, "natural heritage" is defined as:

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[103] A/61/10, para. 66.

[104] Ibid., draft principle 2 (b), p. 107.

[105] Ibid., para. 19 of the commentary to draft principle 2 on the allocation of loss in the case of transboundary harm arising out of hazardous activities, pp. 132-133.

[106] It is worth quoting the references made as a rationale for a philosophical analysis underpinning regimes for damage to biodiversity. They include Michael Bowman, "Biodiversity, intrinsic value and the definition and valuation of environmental harm" in *Environmental Damage in International Law and Comparative Law: Problems of Definition and Evaluation*, Michael Bowman and Alan Boyle, eds. (Oxford, Oxford University Press, 2002), pp. 41-61. For differing approaches on the definition of environmental damage, see e.g. Philippe Sands, *Principles of International Environmental Law*, 2nd ed. (Cambridge, Cambridge University Press, 2003), pp. 876-878.

[107] A/61/10, para. 20 of the commentary to draft principle 2 on the allocation of loss in the case of transboundary harm arising out of hazardous activities, p. 133.

"natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty."[108]

82. In taking a holistic approach, the Commission was also inspired by the reasoning of the International Court of Justice in the *Gabčíkovo-Nagymaros* case:[109]

"... mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage."[110]

83. The Commission's definition of environment is well analysed, well argued and understandable. Therefore, the Special Rapporteur proposes that it be used as a starting point for this topic. At the same time, it should be noted that one of the most important provisions on the protection of the environment in the realm of the law of armed conflict refers to the "natural environment" rather than simply to the "environment". According to paragraph 3 of article 35, the basic rules of Additional Protocol I to the Geneva Conventions of 1949, it "is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the *natural environment*" (emphasis added). The ICRC commentary to that article offers some explanation on the use of the qualifying word "natural". The "natural environment" is distinguished from the "human environment". The "natural environment" refers to the "system of inextricable interrelations between living organisms and their inanimate environment", whereas effects on the "human environment" are understood as effects on "external conditions and influences which affect the life, development and the survival of the civilian population and living organisms".[111] The previously adopted ENMOD Convention refers to "environment" without any definition.[112]

84. As is the case with the definition of "armed conflict", the Commission is thus faced with the following options:

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[108] Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), Paris, 16 November 1972 (United Nations, *Treaty Series*, vol. 1037, No. 15511), art. 2.

[109] *Gabčíkovo-Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Reports 1997*, p. 7.

[110] Ibid., para. 140. The Court in this connection also alluded to the need to keep in view the intergenerational and intragenerational interests and the contemporary demand to promote the concept of sustainable development.

[111] ICRC commentary to article 35 of Additional Protocol I, para. 1451. The reference to "natural environment" is picked up in the preamble of the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, Geneva, 10 October 1980 (United Nations, *Treaty Series*, vol. 1342, No. 22495).

[112] The wider meaning of "environment" in the ENMOD Convention was discussed in connection with the adoption of article 35; see in particular the ICRC commentary to article 35 of Additional Protocol I, paras. 1450-1452.

(a) Use the definition in the draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities;

(b) Adapt the definition in the draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities if the forthcoming work so requires;

(c) Provide for a new definition for the purpose of the work on this topic; or

(d) Not define "environment" at all.

85. Notably, the Commission did not define "environment" in the articles on the law of the non-navigational uses of international watercourses. That said, the term is frequently used. The same is true for the articles on the law of transboundary aquifers. Within the context of the present topic, a definition is likely to be a valuable tool in framing the scope of the conclusions reached by the Commission.

86. As the Special Rapporteur believes that the definition contained in the principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities is a meaningful point of departure, the following definition of the term "environment" is therefore suggested:

> "Environment" includes natural resources, both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors, and the characteristics of the landscape.

IX. Sources and other material to be consulted

87. The work on this topic will necessarily draw upon, inter alia, treaty law, State and international organization practice, customary international law, general principles of international law, decisions of courts and tribunals, and legal writings. A few words should be said about each of these sources in the particular context of this topic.

88. With respect to treaty law, only a limited number of treaties directly regulate the protection of the environment in armed conflict. Such treaties can likely be categorized as arising under the law of armed conflict (international humanitarian law, the law on occupation, and neutrality). In contrast, there is an abundance of treaties and national legislation that regulate environmental matters. Some of these treaties and legislative instruments contain exemptions for military forces, military operations or military materiel. Such exemptions may be directly formulated, such as in the London Dumping Convention, which clearly states that it is not applicable to "vessels and aircraft entitled to sovereign immunity under international law" while placing an obligation on the flag States to "ensure by the adoption of appropriate measures that such vessels and aircraft owned or operated by it act in a manner consistent with the object and purpose of this Convention" and to "inform the [International Maritime] Organization accordingly".[113]

[113] Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention), 29 December 1972 (United Nations, *Treaty Series*, vol. 1046, No. 15749), art. VII, para. 4. Provisions providing for exemptions are of another legal character than provisions providing for immunity.

89. With respect to customary international law, it should be noted that the identification of customary rules relevant to this topic may be particularly difficult given the nature of military planning and military operations. The abundance of practice and internal regulations must not automatically be interpreted as expressions of custom, since the element of *opinio juris* may well be missing. Both States themselves and the documents that they publish emphasize that they draw upon soft law instruments such as handbooks, guidelines and best practices,[114] yet these instruments exist in parallel to binding national legislation and international legal instruments. Sometimes, however, there is a convergence of norms reflected in the soft and hard law instruments, and handbooks, guidelines and best practices, as well as other similar documents, have a real influence on the planning and conduct of military operations. Such influence is particularly significant to the extent that it reveals development in the awareness or positions of States on such matters. Best practices may also set standards that courts or arbitrators take into account.

90. The Special Rapporteur is of the view that judgements and decisions from international courts and tribunals are particularly relevant to this topic. The practice of national courts, however, will be far more difficult to ascertain. As there is undoubtedly a wealth of national case law involving domestic legislation, it would be beneficial to obtain further information on such cases.

91. The work will also draw upon the efforts of international and regional organizations in this area. Several United Nations organs and international organizations are involved in the protection of the environment in relation to armed conflict, such as UNEP, UNESCO and the Office of the United Nations High Commissioner for Refugees, as well as ICRC. The same is true for regional bodies, such as the African Union, the European Union, the League of Arab States and the Organization of American States. Members of the Commission supported and encouraged consultations with such organs, international organizations and regional bodies.[115] The Special Rapporteur is of the view that such consultations are of great assistance. As such, most of these consultations have already taken place and will continue as the work progresses. It goes without saying that work done by such bodies, as well as relevant international law institutes and professional organizations,[116] will be an important contribution.

92. Lastly, it should be noted that the issues raised by the topic have been subject to extensive legal analysis and writings by learned scholars. The Special Rapporteur is faced with two main challenges. The first challenge is to place constraints on the use of scholarly writings. The second challenge is to ensure that views from the major legal systems in the world are appropriately taken into account. These are two diametrical challenges. One is to limit the scope of material; the other is to expand the search for material. To meet these challenges, the Special Rapporteur will systematically seek out legal analyses and commentaries from different regions and

[114] See e.g. statement of 4 November 2013 by the United States in the Sixth Committee on agenda item 81 (Report of the International Law Commission on the work of its sixty-third and sixty-fifth sessions), p. 5. Available from https://papersmart.unmeetings.org/media2/1141885/us-rev.pdf.

[115] A/68/10, para. 142.

[116] The work of other bodies, such as the International Law Association, the Institute of International Law (IDI), the International Union for Conservation of Nature, the International Council of Environmental Law and the Environmental Law Institute, have been, and will continue to be, taken into account.

refrain from referring to all material ever published on the topic. This means that not all literature studied is included in the footnotes of the present report. Instead, the Special Rapporteur has attached a bibliography to the present report which is comprehensive, though not exhaustive.

93. Notwithstanding the Special Rapporteur's active search, locating writings from different regions presents more of a challenge. The Special Rapporteur has encouraged colleagues in the Commission and delegates in the Sixth Committee of the General Assembly to provide the Special Rapporteur with information. With few exceptions, the Special Rapporteur has not been successful, and she therefore maintains her appeal.

X. Relationship with other topics addressed by the Commission, including those on the present agenda[117]

94. In its previous work, the Commission has addressed issues that are of relevance to the present topic, including:

- Effects of armed conflicts on treaties
- Non-navigational uses of international watercourses
- Shared natural resources (law of transboundary aquifers)
- Fragmentation of international law
- Responsibility of States for internationally wrongful acts
- Jurisdictional immunities of States and their property
- Law of the sea

95. Furthermore, the topics of prevention of transboundary harm from hazardous activities (2001) and allocation of loss in the case of transboundary harm arising out of hazardous activities (2006) are also of relevance in this context.

96. In the present report, the Special Rapporteur wishes to reiterate some of the conclusions and commentaries previously adopted by the Commission that are of direct relevance here. Other topics, such as the draft code of crimes against the peace and security of mankind, fragmentation and State responsibility will not be addressed in the present report, as the Special Rapporteur wishes to revert to those topics in subsequent reports.

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[117] The Special Rapporteur has chosen to limit the descriptions of and comments on the previous work of the Commission, since it can be found in the Commission's official documentation. In addition, there exist valuable Secretariat memorandums on several of these topics. See e.g. the memorandum on the effect of armed conflict on treaties: an examination of practice and doctrine (A/CN.4/550 and Corr.1 and 2), the memorandums concerning a draft code of offences against the peace and security of mankind (A/CN.4/39) and a draft code of offences against the peace and security of mankind: compendium of relevant international instruments (A/CN.4/368), a supplement, prepared by the Secretariat, to the digest of the decisions of international tribunals relating to State responsibility (A/CN.4/208) and a study prepared by the Secretariat on "force majeure" and "fortuitous event" as circumstances precluding wrongfulness: survey of State practice, international judicial decisions and doctrine (A/CN.4/315).

Convention on the Law of the Non-navigational Uses of International Watercourses (1997)

97. The Convention on the Law of the Non-navigational Uses of International Watercourses (1997) expressly provides for the protection of international watercourses and installations in time of armed conflict. Specifically, article 29 of that Convention makes it clear that "international watercourses and related installations, facilities and other works shall enjoy the protection accorded by the principles and rules of international law applicable in international and internal armed conflict and shall not be used in violation of those principles and rules".

98. The commentary to draft article 29 on the law of the non-navigational uses of international watercourses prepared by the Commission confirmed that the article was not providing for any new rule but, rather, was to serve as "a reminder that the principles and rules of international law applicable in international and internal armed conflict contain important provisions concerning international watercourses and related works".[118] The Commission was careful not to encroach on the already existing laws of armed conflict[119] while asserting that "the articles themselves remain in effect even in time of armed conflict. The obligation of watercourse States to protect and use international watercourses and related works in accordance with the articles remains in effect during such times".[120]

99. As reflected in the commentary, armed conflict may "affect an international watercourse as well as the protection and use thereof by watercourse States". In these circumstances, the rules and principles that regulate armed conflict apply. The commentary specifies examples of such rules and principles embodied in various conventions. These examples include: the Hague Convention of 1907 Concerning the Laws and Customs of War on Land; Protocol I additional to the Geneva Conventions of 12 August 1949; and the Martens clause.[121] While these Conventions are not directly applicable in non-international armed conflicts, the Commission seemed to suggest that the obligation to protect, however unspecified, is germane in non-international armed conflict.

100. It was recognized by the Commission that States may face serious obstacles when attempting to fulfil their obligation to cooperate through direct contacts in times of armed conflict. These difficulties, however, do not negate the fact that States remain under an obligation to cooperate.[122] It was for this very reason that the Commission inserted a general saving clause specifically providing for indirect procedures.[123] These procedures are intended to address those issues associated with the direct exchange of data and information and other procedures during armed

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[118] See *Yearbook of the International Law Commission, 1994*, vol. II, Part Two (United Nations publication, Sales No. E.96.V.2 (Part 2)), para. 1 of the commentary to draft article 29 on the law of the non-navigational uses of international watercourses, p. 131.

[119] Detailed regulation of the subject matter is considered to be beyond the scope of the instrument; see ibid.

[120] Ibid., para. 3 of the commentary to draft article 29.

[121] Ibid.

[122] Ibid., para. 3 of the commentary to draft article 9. Note that the obligation to cooperate goes beyond article 9.

[123] See ibid., commentary to draft article 9. Similar exceptions appear in other treaties, such as the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), Aarhus, Denmark, 25 June 1998 (United Nations, *Treaty Series*, vol. 2161, No. 37770), art. 4 (4) (b).

conflict, or when there is an absence of diplomatic relations between States. Relevantly, the savings clause provides that the watercourse State is not obliged to provide data and information vital to national defence or security, but the obligation to cooperate in good faith is still applicable.[124]

101. In case of a conflict concerning the use of an international watercourse, special consideration shall be given to "the requirements of vital human needs".[125] The Commission interprets this provision as expressing the same rule as the Martens clause.[126]

Articles on the law of transboundary aquifers (2008)[127]

102. The articles on the law of transboundary aquifers[128] also provide specific protection during armed conflict under article 18. Of particular relevance here, the article asserts:

> "Transboundary aquifers or aquifer systems and related installations, facilities and other works shall enjoy the protection accorded by the principles and rules of international law applicable in international and non-international armed conflict and shall not be used in violation of those principles and rules."[129]

103. Article 18 is modelled on article 29 of the 1997 International Watercourses Convention. The texts of the two articles are almost identical.[130] Moreover, the commentary to article 18 is somewhat similar to the wording contained in the commentary to article 29 of the Watercourses Convention. The references to applicable law, such as the 1907 Hague Convention Concerning the Laws and Customs of War on Land, the Protocols additional to the 1949 Geneva Conventions and the Martens clause are identical in both commentaries.[131] Furthermore, the commentary to the 2008 draft articles makes it clear that the obligation of the aquifer States to protect and utilize transboundary aquifers and related works "should remain in effect even during the time of armed conflict".[132] This serves as a reminder to States of the applicability of the law of armed conflict.

104. Similar to the 1997 Watercourses Convention, the articles on the law of transboundary aquifers provide for an exception from the obligation to provide data or information vital to its national defence or security. At the same time, it obliges States to "cooperate in good faith with other States with a view to providing as much information as possible under the circumstances".[133]

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[124] *Yearbook of the International Law Commission, 1994*, vol. II, Part Two, draft article 31 on the law of the non-navigational uses of international watercourses, p. 132.

[125] Ibid., draft article 10, para. 2.

[126] Ibid., para. 3 of the commentary to draft article 29.

[127] A/63/10, chap. IV, sect. E.

[128] Ibid.

[129] Ibid.

[130] The only difference is the use of the term "non-international armed conflict" instead of "internal armed conflict".

[131] A/63/10, para. 3 of the commentary to draft article 18 on the law of transboundary aquifers.

[132] Ibid.

[133] Ibid., draft article 19. The Commission discussed whether to qualify the word "confidentiality" by using the word "essential", but "decided that there was no compelling reason to deviate from the language of the 1997 Watercourses Convention"; see ibid., para. 1 of the commentary to draft article 19.

105. Importantly, both the Convention on the Law of the Non-navigational Uses of International Watercourses and the articles on the law of transboundary aquifers are applicable in situations of both international and non-international armed conflict. Notwithstanding the fact that the law of armed conflict applies, the duty to cooperate remains. Both conventions make it clear that human needs take priority over other uses.

Articles on the effects of armed conflicts on treaties (2011)[134]

106. This work takes as its starting point the presumption that the existence of an armed conflict does not ipso facto terminate or suspend the operation of treaties, as provided for in the articles on the effects of armed conflicts on treaties (art. 3). In those articles, however, the Commission chose not to identify the specific treaties that would continue to operate. Instead, it elaborated an indicative list of treaties "the subject matter of which involves an implication that they continue in operation, in whole or in part, during armed conflict" and included this list of treaties in the annex to the draft articles (art. 7).

107. However, the Commission addressed the factors indicating whether a treaty is susceptible to termination, withdrawal or suspension (art. 6). According to the Commission, regard shall be had to all relevant factors, including:

(a) The nature of the treaty, in particular its subject matter, its object and purpose, its content and the number of parties to the treaty; and

(b) The characteristics of the armed conflict, such as its territorial extent, its scale and intensity, its duration and, in the case of non-international armed conflict, also the degree of outside involvement.

108. The combined effect of articles 3, 6 and 7 and the annex containing the indicative list of treaties is that, because of their subject matter, several categories of treaties relevant to the protection of the environment may continue in operation during periods of armed conflict.[135]

109. The most significant conclusion, which can be found in article 3, is as follows:

> "The existence of an armed conflict does not ipso facto terminate or suspend the operation of treaties:
>
> (a) as between States parties to the conflict;
>
> (b) as between a State party to the conflict and a State that is not."

110. This finding has two implications: the first is that treaties are not automatically terminated or suspended during an armed conflict. That is to say, States that are parties to a conflict are not automatically devoid of those rights and obligations conferred by various treaties. The second is that a treaty may well be terminated or suspended.

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[134] A/66/10, chap. VI.

[135] Ibid., draft article 7 on the effects of armed conflicts on treaties (Continued operation of treaties resulting from their subject matter) and the indicative list of treaties annexed. The list includes treaties relating to the international protection of the environment, international watercourses and related installations and facilities, aquifers and related installations and facilities, human rights, international criminal justice and, for obvious reasons, the law of armed conflict, including international humanitarian law.

111. While the work on the effects of armed conflicts on treaties is of particular importance, it does have its limitations. First, it regulates only treaty relations between States. Second, it does not answer what customary international law rules, as well as principles of international law, continue to be applicable in times of armed conflict. Furthermore, save for one exception, the articles address situations during armed conflict.[136]

Articles on prevention of transboundary harm from hazardous activities (2001)[137]

112. The articles on prevention of transboundary harm from hazardous activities (2001)[138] do not discuss their application in times of armed conflict. According to the article on scope, the articles apply to "activities not prohibited by international law which involve a risk of causing significant transboundary harm through their physical consequences". Neither the articles nor their commentaries expressly exclude situations of armed conflict. The commentaries do, however, contain an important discussion on the principle of due diligence provided in article 3 on prevention.[139] This discussion included a reference to the *Alabama* case.[140] That said, it is not possible to draw the conclusion that the articles were intended to regulate the behaviour of States in armed conflict. The focus seems to have been peacetime regulation.

Principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities (2006)[141]

113. The 2006 principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities define "damage" as including significant damage caused to persons, property or the environment. This includes loss or damage by impairment of the environment; the costs of reasonable measures of reinstatement of the property, or environment, including natural resources; and the costs of reasonable response measures.[142] Relevantly, the commentary to principle 4 provides an exception to liability for prompt and adequate compensation if the damage was the result of an act of armed conflict, hostilities, civil war or insurrection.[143]

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[136] See ibid., draft article 13, which addresses the revival or resumption of treaty relations subsequent to an armed conflict.

[137] *Yearbook of the International Law Commission, 2001*, vol. II, Part Two (United Nations publication, Sales No. E.04.V.17 (Part 2)), chap. V, draft articles on international liability for injurious consequences arising out of acts not prohibited by international law (prevention of transboundary harm from hazardous activities).

[138] Ibid.

[139] Ibid., para. 9 of the commentary to article 3, p. 154.

[140] Ibid. Due diligence is a legal norm applicable both in peacetime and in situations of armed conflict.

[141] A/61/10, principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, chap. V, sect. E.

[142] Ibid., principle 2 (a) (iii)-(v), pp. 121-122. See also ibid., para. 10 of the commentary to principle 2 on the protection of cultural property in times of war, p. 127.

[143] Ibid., para. 27 of the commentary to principle 4, p. 161. See in particular the examples given in footnote 434.

Other work of the Commission

114. Other relevant prior work by the Commission, such as the articles on jurisdictional immunities of States and their property, and the articles concerning the law of the sea, will be dealt with in the context in which they are relevant.

115. Furthermore, the Commission will benefit from the work undertaken and conclusions made in the ongoing work on the protection of persons in the event of disasters. The work on the articles on human dignity, human rights, the humanitarian principles and the duty to cooperate (including forms of cooperation) will be of particular relevance.[144]

116. The Commission will also benefit from the ongoing work on the protection of the atmosphere, since both topics address the protection of the environment. However, it is unlikely that the two topics will overlap, given that the topic on the protection of the atmosphere is more comprehensive and of a different character than the current topic. Other topics on the Commission's current programme of work, in particular subsequent agreement and subsequent practice in relation to the interpretation of treaties and the identification of customary international law, will also be of assistance to this topic.

XI. Environmental principles and concepts

117. It should be said from the outset that the aim of the present section is to recall principles and concepts in international law that are candidates for continuing application during armed conflict. The extent to which they may be applicable is not addressed. It is not intended that the present report reach any final conclusions at this preliminary stage. Rather, it is to assist in facilitating forthcoming discussions in the Commission.

118. The references to environmental law principles or human rights are made for the purpose of convenience. They are not meant to assert that they are self-contained regimes. As formulated by the Commission's study on fragmentation:

> "[T]he question whether 'international environmental law' designates a special branch of international law within which apply other interpretative principles than apply generally, or merely an aggregate of treaty and customary rules dealing with the environment, may perhaps seem altogether too abstract to be of much relevance. The standard designation of the laws of armed conflict, for instance, as *lex specialis* and a self-contained regime — or even 'a deviant body of rules of public international law' — leaves it wide open to which extent the general rules of, say, the law of treaties are affected."[145]

119. Treaties are, of course, applicable without restriction and to the extent that parties have agreed to be bound in times of peace, that is, before and after armed conflict. Furthermore, customary international law applies as well. Viewed from this perspective, it may seem like a redundant exercise to even address the pre- and post-

[144] See A/66/10, para. 288, arts. 5-10.

[145] Report of the Study Group of the International Law Commission on the fragmentation of international law: difficulties arising from the diversification and expansion of international law (A/CN.4/L.682), para. 133.

conflict phases.[146] However, this is not the case. The pre- and post-conflict phases are addressed precisely because of the uncertainty relating to their application in parallel to the law of armed conflict. As recalled on several occasions, certain provisions of treaties on the law of armed conflict are applicable in peacetime.

120. It is, for obvious reasons, unmanageable to list all "environmental" and "human rights" treaties that exist and address their applicability in time of peace. An even more difficult task would be to attempt to comprehensively chart the interplay between these instruments, the States parties to these treaties and their reservations and so forth. Such an exercise would not be meaningful in that it would attempt to hit a moving target. In addition, it would give only part of the legal picture since both customary law and case law would be excluded.

121. At this stage of the work, a more constructive exercise may be to try to trace the general development of principles and concepts, many of which have found their way into treaties or have obtained, or are likely to obtain, customary international law status.

122. It must be said that the environmental law principles and concepts that are of relevance to the present topic are imprecise and vague and seldom offer clear-cut answers and solutions. Yet they exist. The purpose of the present section is to recall the most prominent lines of development that have taken place since the adoption of the ENMOD Convention (1976) and Protocol I additional to the 1949 Geneva Conventions (1977).

123. Whether a political concept such as sustainable development or precaution has turned into a legal principle is often subject to debate among States and scholars. It is not uncommon for courts and tribunals to take different views on the status of a particular concept. The divergence in views does not prevent them from applying their understanding of the law. The precautionary principle is a good example of this. The Special Rapporteur therefore refers to both "principles" and "concepts" in the present report.

124. As stated above, the Special Rapporteur is of the view that judgements and decisions from international courts and tribunals are of particular relevance. The practice of national courts has been more difficult to ascertain. Obviously, there must be a wealth of national case law with respect to domestic legislation, but this is not necessarily useful in ascertaining whether they reflect the position of a particular State on international law. States have not provided such information. The present report therefore refers to international judgements.

1. Sustainable development

125. Sustainable development is the necessary link between the protection of the environment and its resources and the needs of the human beings. It has a clear intergenerational element. Whatever resources are to be used, they are supposed to be used in a manner that ensures that such resources last for longer than a limited period of time, that is, for more than one generation.

[146] During the debate in the General Assembly, the Russian Federation expressed that "[o]n the topic of protection of the environment in relation to armed conflicts, sufficient regulation already existed under international humanitarian law, since the period before and after an armed conflict was considered to be peacetime, during which the general rules applicable to the protection of the environment were fully applicable". See A/C.6/68/SR.25, para. 47.

126. It is often emphasized that "sustainable development" is more of a political and socioeconomic concept[147] than a legal principle. The legal status of this concept is therefore subject to debate. References to the "principle of sustainability" do not necessarily imply that the user of the term is specifically referring to a legal principle — it may well be that the reference has politicai connotations. In sum, divergent views exist as to whether it has legal implications, whereas others are more doubtful.

127. The International Court of Justice addressed this in the *Gabčíkovo-Nagymaros* case (1997):

> "Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind — for present and future generations — of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development."[148]

128. The Court did not take a position on the legal status of sustainable development, but in his separate opinion Vice-President Weeramantry takes the clear position that sustainable development is a legal principle and "an integral part" of international law.[149]

129. More than 10 years later the Court addressed sustainable development in the *Pulp Mills* case[150] where it referred to the "interconnectedness between equitable and reasonable utilization of a shared resource and the balance between economic development and environmental protection that is the essence of sustainable development". While the Court did not refer to sustainable development as a principle of general international law, Judges Al-Khasawneh and Simma referred to the principle of sustainable development in their joint dissenting opinion.[151] In addition, Judge Cançado Trindade devoted his entire separate opinion to principles

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[147] Duncan French, "Sustainable development", in *Research Handbook on International Environmental Law*, Malgosia Fitzmaurice, David M. Ong and Panos Merkouris, eds. (Cheltenham, Edward Elgar Publishing, 2010), p. 51.

[148] *Gabčíkovo-Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Reports 1997*, p. 7, para. 140.

[149] Ibid., Separate Opinion of Vice-President Weeramantry, pp. 88-116; see his very clear views e.g. on pp. 89, 95 and 110. Other judges viewed the concept in a different way. In his dissenting opinion, Judge Oda views economic development and sustainable development as "conflicting interests", pp. 153-169, at pp. 160-161.

[150] *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010*, p. 14, para. 177.

[151] Ibid., Joint Dissenting Opinion of Judges Al-Khasawneh and Simma, para. 26.

of international law, with a specific discussion on sustainable development as a principle of international law.[152]

130. As formulated by [former] Judge Koroma, "sustainable development has evolved to play a significant role in the Court's jurisprudence, despite the fact that the Court has not yet found it to be a general principle of law within the meaning of article 38 (1) of the Court's Statute".[153] Judge Koroma continues: "Overall, the international law on sustainable development has rapidly evolved and coalesced in the past three decades to the point that it is widely accepted by nearly all States. The International Court of Justice now makes references to sustainable development when adjudicating disputes between States, and has also helped to further develop and refine the concept through its jurisprudence. Going forward, it is clear that the concept of sustainable development will continue to play an increasingly important role in the development of international norms, treaties and judicial decisions."[154]

131. The World Trade Organization (WTO) Panel and Appellate Body have also remarked on the concept of sustainable development. For example, in *European Communities — Conditions for the Granting of Tariff Preferences to Developing Countries*, the Appellate Body noted that the concept was one of the objectives that member States may pursue in accordance with the preamble to the WTO Agreement.[155] In *Shrimp-Turtle*, the Appellate Body remarked that the preambular language "demonstrates a recognition by WTO negotiators that optimal use of the world's resources should be made in accordance with the objective of sustainable development".[156] In *Shrimp-Turtle*, the tribunal also noted that the State concerned should seek to find a cooperative solution with affected States.[157]

132. The Permanent Court of Arbitration addressed sustainable development in the *Iron Rhine Railway* arbitration. There, it was observed that "emerging principles, whatever their current status, make reference to conservation, management, notions

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[152] Ibid., Separate Opinion of Judge Cançado Trindade; see e.g. para. 139 and footnote 118, referring to e.g. Philippe Sands, *Principles of International Environmental Law*, 2nd ed. (Cambridge, Cambridge University Press, 2003), pp. 252, 260 and 266; Christina Voigt, *Sustainable Development as a Principle of International Law* (Leiden, Martinus Nijhoff Publishers, 2009), pp. 145, 147, 162, 171 and 186. As States cannot rely on scientific uncertainties to justify inaction, in the face of possible risks of serious harm to the environment, the precautionary principle has a role to play, as much as "the principle of sustainable development"; Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment*, 3rd ed. (Oxford, Oxford University Press, 2009), p. 163.

[153] Abdul G. Koroma, "Law of sustainable development in the jurisprudence of the International Court of Justice", in *International Law and Changing Perceptions of Security* (Brill, forthcoming).

[154] Ibid. Judge Koroma refers to the *Nuclear Weapons* case (*Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, p. 226) and the *Armed Activities* case (*Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Judgment, I.C.J. Reports 2005*, p. 168) as two cases where the Court has indirectly addressed the issue of sustainable development.

[155] *European Communities — Conditions for the Granting of Tariff Preferences to Developing Countries*, WT/DS246/AB/R, adopted 20 April 2004, para. 94.

[156] *United States — Import Prohibition of Certain Shrimp and Shrimp Products*, Panel Report WT/DS58/R and Corr.1, adopted 6 November 1998, as modified by Appellate Body Report WT/DS58/AB/R, para. 153.

[157] Ibid., para. 168.

of prevention and of sustainable development, and protection for future generations".[158]

2. Prevention and precaution

133. The principle of prevention is the fundamental tenet on which international environmental law rests with its roots tracing back to the *Trail smelter* case.[159] It is closely linked to the principle of precaution.

134. The principle of prevention is recognized as customary international law and is applied mostly in a transboundary context. It is included in international treaties and recognized in case law (including the *Pulp Mill* and *Gabčikovo-Nagymaros* cases referred to above). For example, the European Union has codified the precautionary principle along with the preventive principle in article 191 (2) of the Treaty on the Functioning of the European Union.[160] While the principle of prevention is a self-standing principle, it does not really function in an operative manner if it is not supported by more precise regulations in specific treaties. In essence, there cannot be any liability unless the obligations stemming from the principle are clearly set out. The OSPAR Convention serves as a good example of this. The aim of the Convention is to prevent and eliminate pollution of the marine environment. The starting point is an obligation for parties to apply the "precautionary principle" and the "polluter pays principle".[161] In addition, the Convention contains more detailed obligations so as to achieve the object and purpose of the Convention.

135. In the *Iron Rhine Railway* case (referred to above), the tribunal held that "growing emphasis is being put on the duty of prevention",[162] and furthermore observed that:

> "Environmental law and the law on development stand not as alternatives but as mutually reinforcing, integral concepts, which require that where development may cause significant harm to the environment there is a duty to prevent, or at least mitigate such harm .... This duty, in the opinion of the Tribunal, has now become a principle of general international law. This principle applies not only in autonomous activities but also in activities undertaken in implementation of specific treaties between the Parties."[163]

136. The preventive principle has also been addressed by the European Court of Justice in *United Kingdom v. Commission of the European Communities*, where the Court observed that "[a]rticle 130r(2) [of the EC Treaty] provides that that policy is

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[158] Award in the arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway (*Belgium v. Netherlands*), 24 May 2005, *Reports of International Arbitral Awards*, vol. XXVII, pp. 35-125, para. 58.

[159] *Trail smelter* case (United States, Canada), 16 April 1938 and 11 March 1941, *Reports of International Arbitral Awards*, vol. III (United Nations publication, Sales No. 1949.V.2), pp. 1905-1982.

[160] As Nicolas de Sadeleer points out, most academics regard the principles in article 191 (2) of the Treaty as binding. Nicolas de Sadeleer, *EU Environmental Law and the Internal Market* (Oxford, Oxford University Press, 2014), footnote 180, referring to e.g. Winter, Epiney, Hilson, Krämer, Fisher and Doherty.

[161] Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) (United Nations, *Treaty Series*, vol. 2354, No. 42279), art. 2.

[162] Award in the arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway (*Belgium v. Netherlands*), 24 May 2005, para. 222.

[163] Ibid., para. 59.

to aim at a high level of protection and is to be based in particular on the principles that preventive action should be taken and that environmental protection requirements must be integrated into the definition and implementation of other Community policies".[164]

137. Whereas the principle of prevention focuses on harm based on knowledge or the ability to know, the precautionary principle demands action even without scientific certainty on any harm.[165] The aim of the precautionary principle is to account for potential risks that have yet to be fully explored by scientific research and analysis. If the environmental effects of a particular activity are known, then the measures taken to avoid them are preventative only; if the effects are unknown, then the same measure can be labelled as precautionary. Several instruments refer to them as two distinct principles, but in practice it is not so straightforward, since a separation of the two concepts is difficult to maintain when applying the principles.[166] There are references to the precautionary principle in the sense of a preventive and precautionary approach. There is still no universal agreement as to whether the obligation to take precautionary measures means that the obligation has been elevated to a principle. A little over 10 years ago, Philippe Sands observed that "[s]ome international courts have now been willing to apply the precautionary principle, and others have been willing to do so with stealth".[167] It is interesting to note that the Commission has taken divergent views on this. Within the context of the work on the law of transboundary aquifers, the Commission used the "precautionary approach". The commentary, however, makes it clear that the Commission "was well aware of the differing views on the concept of a 'precautionary approach' as opposed to a 'precautionary principle'". Despite this, it decided to opt for the term "precautionary approach" because it was the least controversial formulation. It was adopted on the understanding that "the two concepts lead to similar results in practice when applied in good faith".[168] This stands in contrast to the view that the Commission had previously taken in its work on the draft articles on the prevention of transboundary harm from hazardous activities. There, it seemed that the Commission referred to the principle of precaution without hesitation.[169]

138. In his separate opinion in the *MOX Plant* case before the International Tribunal for the Law of the Sea, Judge Wolfrum remarks that "[i]t is still a matter of discussion whether the precautionary principle or the precautionary approach in

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[164] *United Kingdom v. Commission of the European Communities* (C-180/96) (1998), ECR I-2265, paras. 99-100. See also *R. v. Ministry of Agriculture, Fisheries and Food, Commissioners of Customs and Excise* (C-157/96) (1998) ECR I-2211, para. 64.

[165] Arie Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*, International Environmental Law and Policy Series, vol. 62 (The Hague, Kluwer Law International, 2002), see e.g. pp. 36-37.

[166] Prevention and precaution may be two sides of the same coin in the context of environmental law. As will be shown in a future report, the distinction between "knowing" and "not knowing and not being able to foresee" as a ground for a decision may be the difference between a breach of the laws of armed conflict and a legally acceptable action.

[167] Philippe Sands, *Principles of International Environmental Law* (Cambridge, Cambridge University Press, 2003), p. 290.

[168] A/63/10, draft articles on the law of transboundary aquifers, para. 5 of the commentary to article 12.

[169] *Yearbook of the International Law Commission, 2001*, vol. II, Part Two, draft articles on prevention of transboundary harm from hazardous activities, paras. 6-7 of the commentary to article 10, pp. 162-163.

international environmental law has become part of customary international law" and that "[t]his principle or approach applied in international environmental law reflects the necessity of making environment-related decisions in the face of scientific uncertainty about the potential future harm of a particular activity".[170]

139. The principle of precaution is aimed at preventing those risks that are not foreseeable or scientifically ascertained. Its application can vary because it is dependent on contextual considerations. Different techniques can be applied to meet the requirements of the precautionary principle, such as prohibition of substances or techniques, applying best technology available, performing environmental impact assessments (EIAs), imposing environmental quality standards, conservation measures, or integrated environmental regulation.[171] Alternatively, to use the words of the Commission: "[The precautionary principle] implies the need for States to review their obligations of prevention in a continuous manner to keep abreast of the advances in scientific knowledge."[172]

140. WTO has dealt with the principle in several cases. In *EC — Hormones*, the European Community proposed that the precautionary principle should be regarded as a "general customary rule of international law or at least a general principle of law".[173] While the Appellate Body remarked in its ruling that the principle "still awaits authoritative formulation",[174] it also noted that the principle was reflected in article 5.7 of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and that "there is no need to assume that Article 5.7 exhausts the relevance of a precautionary principle".[175] In *US — Continued Suspension/Canada — Continued Suspension*, the Appellate Body of WTO once more observed that the precautionary principle is reflected in article 5.7 of the SPS Agreement.[176] Furthermore, the Appellate Body noted in *Japan — Measures Affecting Agricultural Products* that article 5.7 of the SPS Agreement creates an obligation upon members to "seek to obtain the additional information necessary for a more objective risk assessment".[177] In the *EC — Hormones* case, the Appellate Body observed that "responsible and representative governments may act in good faith on the basis of what, at a given time, may be a divergent opinion coming from qualified and respected sources".[178]

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[170] International Tribunal for the Law of the Sea, Case No. 10, *The MOX Plant Case (Ireland v. United Kingdom), Provisional Measures*, Order of 3 December 2001, Separate Opinion of Judge Wolfrum.

[171] Arie Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*, see e.g. p. 52.

[172] *Yearbook of the International Law Commission, 2001*, vol. II, Part Two, draft articles on prevention of transboundary harm from hazardous activities, para. 7 of the commentary to draft article 10, p. 163.

[173] *European Communities — Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/AB/R, WT/DS48/AB/R, adopted 13 February 1998, para. 16.

[174] Ibid,. para. 123.

[175] Ibid., para. 124.

[176] *United States/Canada — Continued Suspension of Obligations in the EC — Hormones Dispute*, WT/DS321/AB/R, adopted 14 November 2008, para. 680.

[177] *Japan — Measures Affecting Agricultural Products*, WT/DS76/AB/R, adopted 19 March 1999, para. 92.

[178] *European Communities — Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/AB/R, WT/DS48/AB/R, para. 194.

141. In *EU — Biotech*, the Panel referred to the decision of the Appellate Body in *EC — Hormones* and that the "legal debate over whether the precautionary principle constitutes a recognized principle of general or customary international law is still ongoing".[179] The Panel remarked that "[s]ince the legal status of the precautionary principle remains unsettled, like the Appellate Body before us, we consider that prudence suggests that we not attempt to resolve this complex issue, particularly if it is not necessary to do so".[180]

142. The dissenting opinion of seven judges of the European Court of Human Rights in *Balmer-Schafroth v. Switzerland* speaks to the legal importance of the principle.[181] Because of the lack of any means to review the safety of the operating conditions of a nuclear power station when the operating licence was renewed, the dissenting judges argued that article 6 of the European Convention on Human Rights (the right of effective remedy) had been violated. The dissenting judges argued that the article had been violated as the "applicants were not even afforded the opportunity of establishing before a court how serious the danger was and how great the resulting risk to them".[182] The dissenting judges remarked that "[t]he majority appear to have ignored the whole trend of international institutions and public international law towards protecting persons and heritage, as evident in European Union and Council of Europe instruments on the environment, the Rio agreements, UNESCO instruments, the development of the precautionary principle and the principle of conservation of the common heritage" and "would have preferred it to be the judgment of the European Court that caused international law for the protection of the individual to progress in this field by reinforcing the 'precautionary principle' and full judicial remedies to protect the rights of individuals against the imprudence of authorities."[183]

143. Similarly, in the case of *Land Reclamation by Singapore in and around the Straits of Johor* before the International Tribunal for the Law of the Sea, the principle was described by Malaysia as one "which under international law must direct any party in the application and implementation of those obligations".[184] The European Court of Justice has also granted importance to the issue of precaution in cases such as *Pfizer Animal Health SA v. Council of the European Union* (T-13/99), where the Court stated that "under the precautionary principle the Community institutions are entitled, in the interests of human health, to adopt, on the basis of as yet incomplete scientific knowledge, protective measures which may seriously harm legally protected positions, and they enjoy a broad discretion in that regard", and *Alpharma Inc. v. Council of the European Union* (T-70/99), where the Court stated that "[a]lthough it is common ground that the Community institutions may, in the context of Directive 70/524, adopt a measure based on the precautionary principle,

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[179] *European Communities – Measures Affecting the Approval and Marketing of Biotech Products*, WT/DS291/R / WT/DS292/R / WT/DS293/R / Add.1 to Add.9 and Corr.1, adopted 21 November 2006, para. 7.88.

[180] Ibid., para. 7.89.

[181] *Balmer-Schafroth and Others v. Switzerland*, 26 August 1997, Judgement, Application No. 22110/93, ECHR *Reports* 1997-IV, Dissenting Opinion of Judge Pettiti, joined by Judges Gölcüklü, Walsh, Russo, Valticos, Lopes Rocha and Jambrek.

[182] Ibid.

[183] Ibid.

[184] International Tribunal for the Law of the Sea, Case No. 12, *Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v. Singapore), Provisional Measures*, Order of 8 October 2003, para. 74.

the parties nevertheless fail to agree on either the interpretation of that principle or whether the Community institutions correctly applied it in the present case".[185] Furthermore, in *Association Greenpeace France and Others v. Ministère de l'Agriculture et de la Pêche and Others* (C-6/99), the Court stated that "observance of the precautionary principle is reflected in the notifier's obligation, laid down in article 11(6) of Directive 90/220".[186]

144. As demonstrated by the *Waddenzee* case, European Union member States are obliged to abide by the principle even where it is not specifically mentioned in a particular directive or regulation.[187] In *Waddenzee*, a Dutch environmental impact assessment regulation concerning fishing activities in special protection areas for birds in the sea of Wadden was brought before the Court of Justice. The Court remarked that the matters at hand were to be interpreted "[i]n the light, in particular, of the precautionary principle, which is one of the foundations of the high level of protection pursued by Community policy on the environment".[188]

145. Generally, the institutions of the European Union have been granted a certain amount of discretion with respect to the means used when devising specific measures aimed at implementing these principles owing to their general nature.[189] Nonetheless, discretion may be limited, or even non-existent, when the principle in question is specified within a thorough authorization scheme.[190]

146. Similarly, the European Parliament and the Council have both held that environmental impact assessments are one way of respecting the preventive principle. This is demonstrated by the following: (a) the 2001 Directive on the assessment of the effects of certain plans and programmes on the environment;[191] (b) the 1992 Directive on the conservation of natural habitats and of wild fauna and

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[185] *Alpharma Inc. v. Council of the European Union*, Case T-70/99 (2002) ECR II-3495, para. 137.

[186] *Association Greenpeace France and Others v. Ministère de l'Agriculture et de la Pêche and Others*, Case C-6/99 (2000) ECR I-1651, para. 44.

[187] *Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v. Staatssecretaris van Landbouw, Natuurbeheer en Visserij (Waddenzee)*, Case C-127/02 (2004) ECR I-7405, para. 44: "In the light, in particular, of the precautionary principle, which is one of the foundations of the high level of protection pursued by Community policy on the environment, in accordance with the first subparagraph of Article 174(2) EC, and by reference to which the Habitats Directive must be interpreted". See also de Sadeleer, *EU Environmental Law and the Internal Market*, p. 44.

[188] *Waddenzee*, para. 44.

[189] De Sadeleer, *EU Environmental Law and the Internal Market*, p. 42.

[190] *Waddenzee*, para. 44. *Sweden v. Commission of the European Communities*, Case T-229/04 (2007) ECR II-2437, see e.g. paras. 163-164:
"163. It should be pointed out, however, that it can be seen from Article 4(1)(a) of Directive 91/414 that in order to fulfil the requirements laid down in Article 4(1)(b) of that directive, the uniform principles provided for in Annex VI must be applied. Moreover, the second recital in the preamble to Directive 97/57, fixing the content of Annex VI, states that that annex must lay down uniform principles to ensure the application of the requirements of Article 4(1)(b), (c), (d) and (e) of Directive 91/414 in a uniform manner and as stringently as is sought by the directive.
"164. It follows that Article 4(1)(b)(iv) of Directive 91/414, to which Article 5(1)(b) of that directive expressly refers, requires compliance with the uniform principles laid down in Annex VI."

[191] Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, OJ L197, 21 July 2001.

flora;[192] and (c) other measures, such as the obligation to exchange data on the impact of harmful activities.[193]

147. Interestingly, the European Court of Justice, in the 2011 case of *Commission v. Spain*,[194] stressed the fact that a preventive approach is more cost-effective as opposed to taking measures a posteriori. This line of argument is also evident in military handbooks on the topic (such as in the joint military guidebook created by Finland, Sweden and the United States).

3. Polluter pays

148. The polluter-pays principle dates back to the *Trail smelter* and *Chorzów factory*[195] cases. Its purpose is remedial. It is probably an accurate reflection to state that the principle was "originally devised to allocate the cost of pollution prevention and control measures, [it] has matured into a formidable strategy for the protection of the environment, human health and safety, resource management and generally ensuring environmentally sustainable activities".[196] The polluter-pays principle is applicable both in inter-State relations and in the context of civil liability regimes.

149. The *US — Chemical Tax* case, before the General Agreement on Tariffs and Trade (GATT) Dispute Settlement Panel in 1987, held that GATT rules on tax adjustment allow for parties to apply the principle but do not require it. The Panel stated that while the regulation would "give the contracting party [...] the possibility to follow the Polluter-Pays Principle", it did not oblige States to do so.[197] The European Court of Justice also took note of this principle in *Standley and Others*, where the Court observed that "the polluter pays principle reflects the principle of proportionality".[198]

4. Environmental impact assessment

150. Environmental impact assessment (EIA) is part of the work to prevent environmental harm from occurring. As has been pointed out, EIA is a procedure to be undertaken. It does not impose substantive environmental standards or indicate what results are to be achieved.[199] Despite this, the obligation to undertake EIAs has become part of both national and international law. One of the most prominent conventions in this respect is the 1991 Convention on Environmental Impact Assessment in a Transboundary Context (the so-called Espoo Convention).

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[192] Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, OJL 206, 22 July 1992.

[193] Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, art. 7.

[194] *Commission v. Spain*, Case C-400/08 (2011) ECR I-915, para. 92.

[195] *Case concerning the Factory at Chorzów*, PCIJ Series A, No. 9, 26 July 1927.

[196] Priscilla Schwartz,"The polluter-pays principle", in *Research Handbook on International Environmental Law*, Malgosia Fitzmaurice, David M. Ong and Panos Merkouris, eds. (Cheltenham, Edward Elgar Publishing, 2010), p. 257.

[197] *United States — Taxes on Petroleum and Certain Imported Substances*, report of the Panel adopted on 17 June 1987 (L/6175-34S/136), para. 5.2.5.

[198] *R. v. Secretary of State for the Environment, Minister of Agriculture, Fisheries and Food, ex parte H. A. Standley and Others*, Case C-293/97 (1999) ECR I-2603, paras. 51-52.

[199] Olufemi Elias, "Environmental impact assessment", in *Research Handbook on International Environmental Law*, Malgosia Fitzmaurice, David M. Ong and Panos Merkouris, eds. (Cheltenham, Edward Elgar Publishing, 2010), p. 227.

151. In the *Maffezini* case, the International Centre for Settlement of Investment Disputes (ICSID) confirmed that EIAs are "basic for the adequate protection of the environment and the application of appropriate preventive measures".[200] The arbitrators also noted that this was the case "not only under Spanish [...] law, but also increasingly so under international law".[201]

152. In the *Iron Rhine Railway* arbitration, the tribunal noted that the "reactivation of the Iron Rhine railway cannot be viewed in isolation from the environmental protection measures necessitated by the intended use of the railway line. These measures are to be fully integrated into the project and its costs."[202] The case provides support for the imposition of a general requirement for an EIA under international law, as well as underscoring the increasing importance that is being placed on the duty of prevention. The requirement of EIAs has also been described as "very prevalent" in the previous work of the Commission.[203]

153. In their first report of 2014, the International Law Association's Study Group on Due Diligence in International Law claims that such EIAs can be a way for a State to live up to a standard of due diligence.[204]

5. Due diligence

154. Due diligence is a multifaceted concept in international law that is both applicable in peacetime and in situations of armed conflict. There is a considerable amount of case law that refers to "due diligence"[205] and its historical roots date back centuries. The substance of the obligation is wide-ranging in that it applies to multiple fields of international law. For example, its application is not merely limited to circumstances involving aliens in State territory. It is relevant in international investment law, human rights law, and even in the context of the laws of armed conflict.

155. It is this multifaceted function of due diligence that has led the International Law Association to set up a Study Group on Due Diligence. The aim is "to consider the extent to which there is a commonality of understanding between the distinctive areas of international law in which the concept of due diligence is applied".[206]

156. The standard of due diligence constitutes an obligation of conduct rather than an obligation of result, as has been noted by the Commission previously in its work on the draft articles on prevention of transboundary harm from hazardous activities, as well as by the International Law Association's Study Group on Due Diligence.[207]

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[200] *Emilio Agustin Maffezini v. Kingdom of Spain*, 2001, ICSID Case No. ARB/97/7, dispatched to the parties on 31 January 2001, para. 67.

[201] Ibid.

[202] Award in the arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway (*Belgium v. Netherlands*), 24 May 2005, *Reports of International Arbitral Awards*, vol. XXVII, pp. 35-125, para. 223.

[203] *Yearbook of the International Law Commission, 2001*, vol. II, Part Two, para. 4 of the commentary to draft article 7 on prevention of transboundary harm from hazardous activities, p. 158.

[204] International Law Association, Study Group on Due Diligence in International Law, First Report, Duncan French (Chair) and Tim Stephens (Rapporteur), 7 March 2014, p. 28.

[205] The Special Rapporteur will return to this issue at a later stage.

[206] International Law Association, Study Group on Due Diligence in International Law, First Report, p. 1

[207] Ibid., p. 17.

In this regard, it is interesting to note that the International Tribunal for the Law of the Sea held that taking precautionary measures was a part of due diligence in their seabed mining advisory opinion.[208]

XII. Human rights and the environment

157. It is often emphasized that human rights cannot be enjoyed in a degraded environment. However, it does not automatically follow that there exists a customary law rule establishing an individual human right to a clean environment. The link between a clean environment and the enjoyment of human rights is indirect and secured through other established rights, such as the right to health, food and acceptable living conditions.[209]

158. Examination of the relationship between the environment and international human rights law has been undertaken in several regional contexts. As exemplified below, the treatment of human rights norms in certain regional instruments and human rights bodies suggests that such norms are of potential relevance to this topic.

159. As an example, the European Convention on Human Rights does not contain a general right of protection of the environment as such, but environmental issues have been found to implicate other rights.[210] For example, the European Court of Human Rights has previously held that certain acts constitute a violation of the right to life or health, as well as the right to respect one's home and one's private and family life.[211]

160. The European Convention on Human Rights also does not expressly provide for an individual right to a clean environment, but other provisions of the Convention are capable of achieving a similar result. On more than one occasion,

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[208] International Tribunal for the Law of the Sea, Case No. 17, *Responsibilities and Obligations of States Sponsoring Persons and Entities with respect to Activities in the Area (Request for Advisory Opinion Submitted to the Seabed Disputes Chamber)*, Advisory Opinion of 1 February 2011, para. 131.

[209] But see also the African Charter on Human and Peoples' Rights and the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (Protocol of San Salvador). The Conventions codify these so-called third-generation rights as collective rights: article 24 of the African Charter provides that "[a]ll peoples shall have the right to a general satisfactory environment favourable to their development". See African Charter on Human and Peoples' Rights, adopted in Banjul on 27 June 1981 and entered into force on 21 October 1986. Available from www.achpr.org/files/instruments/achpr/banjul_charter.pdf. Hence there is a clear reference to "peoples" rather than to an individual (a person). Yet it is the individual person that enjoys this right within its group (peoples). Moreover, article 11 of the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights establishes both an individual right "to a healthy environment" and imposes an obligation on States to "promote the protection, preservation, and improvement of the environment". See the Protocol of San Salvador, available from www.oas.org/juridico/english/treaties/a-52.html.

[210] *Di Sarno and Others v. Italy*, 10 January 2012, Judgement, Application No. 30765/08, para. 80; and *Kyrtatos v. Greece*, 22 May 2003, Judgement, Application No. 41666/98, ECHR *Reports of Judgments and Decisions* 2003-VI (extracts), para. 52.

[211] *Lopez Ostra v. Spain*, 9 December 1994, Judgement, Application No. 16798/90, ECHR Series A, No. 303-C; *Guerra and Others v. Italy*, 19 February 1998, Judgement, Application No. 14967/89, ECHR *Reports* 1998-I.

the European Court of Human Rights has held there to be a positive obligation on the State to take reasonable and appropriate measures[212] aimed at protecting the environment. It could be said that these obligations are similar to that reflected in the preventive and precautionary principle. There are conflicting views as to the extent of the margin of appreciation to be afforded to States that can be resolved only by reference to the context of a particular case.[213] However, it is recognized that States must balance the general interests of the community with regard to the environmental objectives with the rights of individuals.[214]

161. Moreover, some decisions in the context of the Inter-American system refer to the disclosure of information to the peoples concerned. The obligation to disclose information[215] derived from human rights law is well reflected in the procedural content of the due diligence principle.[216] Inherent in the requirement to consult the public is an obligation to disclose information. Decisions relating to the environment within the Inter-American system (Court or Commission) refer to a series of rights belonging to the American people, such as the right to property, to freedom of movement and residence, to humane treatment, to judicial guarantees, and to judicial protection.[217] As far as it was possible to investigate those judgements, they do not appear to implicitly reference principles of environmental law.

162. The communication of the African Commission on Human and Peoples' Rights in the *Ogoniland* case[218] clarifies the obligation of States to take reasonable measures to prevent environmental harm. In addition to the obligation to avoid direct participation in the contamination of air, water and soil, the African Commission's communication also outlines the obligation to protect the population from environmental harm.[219] The communication emphasizes the importance of performing the following measures in order to fulfil the right to health and clean environment. Such measures include: "independent scientific monitoring of threatened environments"; public environmental and social impact studies prior to any "major industrial development"; and "monitoring and providing information to

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[212] *Băcilă v. Romania*, 30 March 2010, Judgement, Application No. 19234/04, ECHR Series 2009/11, para. 60; *Di Sarno and Others v. Italy*, 10 January 2012, Judgement, Application No. 30765/08, para. 80.

[213] *Hatton and others v. United Kingdom*, 8 July 2003, Application No. 36022/97, Judgement, 8 July 2003, para. 86, ECHR *Reports of Judgments and Decisions* 2003-VIII.

[214] *Lopez Ostra v. Spain*, 9 December 1994, Judgement, Application No. 16798/90, para. 51; *Hatton and Others v. United Kingdom* (Third Section), 2 October 2001, Judgement, Application No. 36022/97, ECHR *Reports of Judgments and Decisions* 2003-VIII, paras. 96-97. See also *Balmer-Schafroth and Others v. Switzerland*, 26 August 1997, Judgement, Application No. 22110/93, Dissenting Opinion of Judge Pettiti, joined by Judges Gölcüklü, Walsh, Russo, Valticos, Lopes Rocha and Jambrek, as mentioned supra.

[215] *Guerra and Others v. Italy*, 19 February 1998, Judgement, Application No. 14967/89, para. 60.

[216] International Law Association, Study Group on Due Diligence in International Law, First Report, p. 28.

[217] See for example the collection of regional decisions made by the Independent Expert on Human Rights and the Environment, John H. Knox, available from http://ieenvironment.org/regional-decisions.

[218] African Commission on Human and Peoples' Rights, Communication 155/96, *Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v. Nigeria*, 27 May 2002.

[219] Ibid., para. 50.

those communities exposed to hazardous materials and activities".[220] Relevantly, these requirements from the *Ogoniland* case are almost identical to that required by an environmental impact assessment under environmental law.

163. The fact that the legal character of human rights differs from norms of international environmental law makes it difficult to perform a neat comparison. That is to say, human rights guarantee those rights belonging to an individual, while international environmental law focuses on inter-State relations.[221] This explains why it is uncommon to find references to principles of environmental law in human rights and, on the rare occasion that one can, such references are often only fleeting.

Indigenous people and environmental rights

164. Indigenous people have a special relationship with their traditional land. They hold their own diverse concepts of development that are based on their traditional values, visions, needs and priorities.[222] Their ancestral land is of fundamental significance for their collective physical and cultural survival as peoples.[223] The link between indigenous people and their land is evident in the fact that 95 per cent of the top 200 areas with the highest and most threatened biodiversity are indigenous territories.[224]

165. Indigenous peoples' rights arise from the "recognition that their special relationship with the environment, and the importance of this relationship for their survival as distinct peoples, sets them aside from the remainder of the population and requires special legal status".[225] The rights of indigenous peoples are recognized in several treaties and instruments, as well as case law.[226]

166. Indigenous peoples may be particularly affected by armed conflict. Therefore, it is important to note that article 16 of the International Labour Organization (ILO)

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[220] Ibid., para. 53.

[221] The difference is described in the following way by the International Law Association Study Group on Due Diligence in page 14 of its first report: "International human rights law (IHRL) differs from most other fields of international law to the extent that it primarily addresses the internal affairs of States. In other fields, such as international environmental law, the principle of sovereignty leaves the internal affairs of States largely unexamined, and focuses instead on transboundary (inter-nation-al) injuries of moral or material nature."

[222] Permanent Forum on Indigenous Issues, "Who are indigenous peoples?", Fact Sheet. Available from www.un.org/esa/socdev/unpfii/documents/5session_factsheet1.pdf.

[223] Ibid.

[224] Gonzalo Oviedo, Luisa Maffi and Peter Bille Larsen, *Indigenous and Traditional Peoples of the World and Ecoregion Conservation: An Integrated Approach to Conserving the World's Biological and Cultural Diversity* (Gland, World Wide Fund for Nature, 2000). Available from www.terralingua.org/wp-content/uploads/downloads/2011/01/EGinG200rep.pdf.

[225] Roger Plant, *Land Rights and Minorities*, Minority Rights Group International Report 94/2 (London, Minority Rights Group, 1994).

[226] They include the Convention on Biological Diversity, Rio de Janeiro, Brazil, 5 June 1992 (United Nations, *Treaty Series*, vol. 1760, No. 30619), the International Covenant on Economic, Social and Cultural Rights, New York, 16 December 1966 (see resolution 2200 A (XXI), annex), the Rio Declaration on Environment and Development, and Agenda 21 (United Nations Conference on Environment and Development, 1992), Rio de Janeiro, 3-14 June 1992, A/CONF.151/26/Rev.1 (Vol. I), the Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities (adopted by the General Assembly in resolution 47/135) and the United Nations Declaration on the Rights of Indigenous Peoples (adopted by the Assembly in resolution 61/295).

Convention No. 169 (1989)[227] deals explicitly with the displacement of indigenous peoples.[228] One of the most important rules in the Convention is found in article 16 (1), which states that indigenous peoples shall not be removed from their lands. This is the basic principle that should be applied under all normal circumstances. However, acknowledging that there may be circumstances where this becomes unavoidable, this should be done only as an exceptional measure.[229] In cases where relocation was necessary, indigenous peoples should have the right to return as soon as the reason for which they had to leave is no longer valid.[230] For example, in the case of a war, or natural disaster, they can go back to their lands when it is over. In cases where such unavoidable relocation becomes a permanent situation, indigenous peoples have the right to lands of an equal quality, in addition to legal rights relating to the land they previously occupied. This may include rights relating to the agricultural potential of the lands and legal recognition of ownership to that land.[231]

XIII. Future programme of work

167. The second report will focus on the law applicable during both international and non-international armed conflict. It will discuss in more detail particular aspects only briefly touched upon in the present report, including issues of human and indigenous rights relevant to this topic. The second report will contain both an analysis of any existing rules of armed conflict considered relevant to the topic, as well as their relationship to the relevant law applicable during peacetime. The character of the second report will be different from the present report. It is likely to be both more analytical and concrete, since it will contain proposals for guidelines (conclusions/recommendations). The third report (2016) will focus on post-conflict measures. It is likely to contain a limited number of guidelines, conclusions or recommendations.

168. In the presentation made by the Special Rapporteur in 2013, it was envisaged that the time frame would be three years, with one report to be submitted for consideration by the Commission each year. The Special Rapporteur believes that this time frame is realistic, provided the outcome of the work takes the form of guidelines, conclusions or recommendations.

169. With respect to the content of the guidelines (conclusion/recommendations) themselves, the Special Rapporteur in her second report intends to propose that they address, inter alia, general principles, preventive measures, cooperation, examples of rules of international law that are candidates for continued application during armed conflict and protection of the marine environment. The third report will include proposals on post-conflict measures, including cooperation, sharing of information and best practices, and reparative measures.

170. In the view of the Special Rapporteur, such a plan of work is desirable. It will allow for the Commission to obtain a comprehensive overview of the legal

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[227] Indigenous and Tribal Peoples Convention, 1989 (No. 169), which revised the Indigenous and Tribal Populations Convention, 1957 (No. 107).

[228] ILO, *Indigenous and Tribal Peoples' Rights in Practice: A Guide to ILO Convention No. 169* (Geneva, 2009), pp. 97-98.

[229] Convention No. 169, art. 16 (2).

[230] Ibid., art. 16 (3).

[231] Ibid., art. 16 (4).

challenges raised by the increasing concern for the environmental implications of activities that occur in the context of armed conflict. Most importantly, it will create favourable conditions in which the Commission may draw appropriate conclusions and recommend practical guidelines.

171. Should there be a need to continue with enhanced progressive development or codification as a result of the work undertaken, a decision would need to be taken by the Commission, or by States, at a later stage. It may seem like this approach is overly cautious, or even lacks ambition, but the effect of small steps must not be underestimated. In addition, it would be well within the scope of article 1 of the statute of the Commission, namely, that the Commission "shall have for its object the promotion of the progressive development of international law and its codification".

172. The Special Rapporteur acknowledges that different views have been expressed both within the Commission and in the General Assembly as to the final outcome of the work, which has yet to be decided. While the Special Rapporteur has expressed her initial view, she remains in the hands of a future decision by the Commission.[232]

173. The Special Rapporteur will continue consultations with other entities, such as ICRC, UNESCO and UNEP, as well as regional organizations. However, it would also be of great value if the Commission were to repeat its request to States to provide examples of when rules of international environmental law, including regional and bilateral treaties, have continued to apply in times of international or non-international armed conflict. Furthermore, it would also be of assistance if States were to provide examples of national legislation relevant to the topic and case law in which international or domestic environmental law has been applied.

[232] A/68/10, para. 143.

Annex

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